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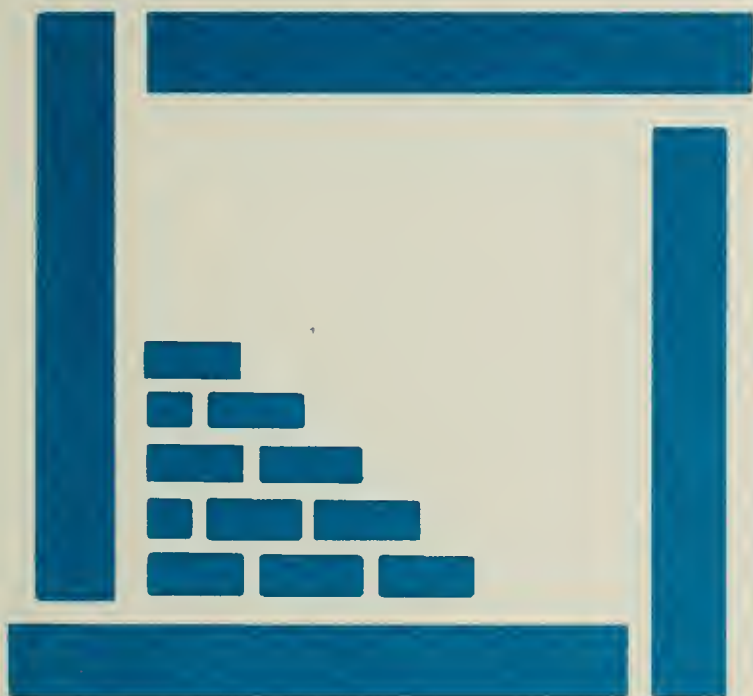
# Census of Construction Industries

CC87-A-9

GEOGRAPHIC AREA SERIES

## Pacific States

Alaska, California, Hawaii,  
Oregon, Washington



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# ACKNOWLEDGMENTS

Many persons participated in the various activities of the 1987 Census of Construction Industries.

The overall planning and review of the census operations were performed by the staff of the Office of the Assistant Director for Economic and Agriculture Censuses.

This report was prepared in the Construction Statistics Division. **Barry A. Rappaport**, Assistant Division Chief for Industry Surveys, was responsible for the overall planning, management, and coordination of the census of construction industries. Planning and implementation were under the direction of **A. William Visnansky**, Chief, Census Operations Branch, with primary staff assistance by **Juliana Van Berkum**, **Barbara J. Hadden**, **Edward R. Glover**, **Susan L. Hostetter**, **Shirley M. Baker**, and **Carolyn J. Stone**. Under the direction of **Jesse Pollock**, **Edward K. Ricketts** and **Dennis K. Duke** developed the sampling plans and variance and estimation specifications.

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were performed by the staff of the Data Preparation Division, **Joseph S. Harris**, Chief.

Geographic coding procedures and associated computer programs were developed by the staff of the Geography Division, **Robert W. Marx**, Chief.

The computer processing systems were developed and coordinated in the Economic Programming Division, **Barry M. Cohen**, Chief, and **H. Ray Dennis**, Assistant Chief. **Sarah W. Baumgardner**, Chief, Construction Census Branch, was responsible for the design and implementation of the computer systems. The computer programs were prepared under the supervision of **Barbara L. Lambert**, assisted by **Herbert Isham** of the Construction Statistics Division. **Linda M. Mersh** and **James Dallmann** assisted in establishing and maintaining the production control system.

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Special acknowledgment is also due the many businesses whose cooperation has contributed to the publication of these data.

If you have any questions concerning the statistics in this report, call (301) 763-7546.

# **1987**

# **Census of Construction Industries**

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## **Pacific States**

Alaska, California, Hawaii,  
Oregon, Washington

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Issued July 1990



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## PURPOSE AND USES OF THE ECONOMIC CENSUSES

The economic censuses are the major source of facts about the structure and functioning of the Nation's economy. They provide essential information for government, business, industry, and the general public.

*Economic censuses furnish an important part of the framework for such composite measures as the gross national product, input-output measures, production and price indexes, and other statistical series that measure short-term changes in economic conditions.*

*Policy-making agencies of the Federal Government use the data, especially in monitoring economic activity and providing assistance to business.*

*State and local governments use the data to assess business activities and tax bases within their jurisdictions and to develop programs to attract business.*

*Trade associations study trends in their own and competing industries, and keep their members informed of market changes.*

*Individual businesses use the data to locate potential markets and to analyze their own production and sales performance relative to industry or area averages.*

## AUTHORITY AND SCOPE

Title 13 of the United States Code (sections 131, 191, and 224) directs the Census Bureau to take the economic censuses every 5 years, covering years ending in 2 and 7. The 1987 Economic Censuses consist of the—

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction Industries

Special programs also cover enterprise statistics and minority-owned and women-owned businesses. (The 1987 Census of Agriculture and 1987 Census of Governments are conducted separately.) The next economic censuses are scheduled to be taken in 1993 covering the year 1992.

## AVAILABILITY OF THE DATA

The results of each of the economic censuses are available in printed reports, for sale by the U.S. Government Printing Office, and on microfiche, computer tape, compact discs with read-only memory, and flexible diskettes, for sale by the Census Bureau. Order forms for all types of products are available on request from Customer Services, Census Bureau, Washington, DC 20233. A more complete description of publications being issued from this census is on the inside back cover of this document.

Census facts are also widely disseminated by trade associations, business journals, and newspapers. Volumes containing census statistics are available in most major public and college libraries. Finally, State Data Centers in every State and Business and Industry Data Centers in many States also supply economic census statistics.

## WHAT'S NEW IN 1987

Several changes have taken place for the 1987 censuses. Data will be reported on the basis of the newly revised Standard Industrial Classification (SIC) system with selected reports including "bridge tables," linking the old and new classification systems. A new set of metropolitan



areas has been adopted, and more detailed information will be available for businesses with no paid employees. For additional information on these changes, review the subsequent text.

One important change involves receipts of contractors and builders. Prior to 1987, the Census of Construction Industries collected receipts as the primary measure of construction activity. For 1987, the census collected the "value of construction work done" to better measure actual construction activity done during the year. Differences between the two concepts occur when work is done in one year and payment received either from the prior or in the succeeding year. In addition, receipts do not include work a contractor performs for its own account and use.

## **HISTORICAL INFORMATION**

The economic censuses have been taken together as an integrated program at 5-year intervals since 1967, and before that for 1963, 1958, and 1954. Prior to that time, the individual censuses were taken separately at varying intervals.

The economic censuses trace their beginnings to the 1810 Decennial Census, when questions on manufacturing were included with those for population. Coverage of economic activities was expanded for 1840 and subsequent censuses to include mining and some commercial activities. In 1902, Congress established a permanent Census Bureau and directed that a census of manufactures be taken every 5 years. The 1905 manufactures census was the first time a census was taken apart from the regular every-10-year population census.

The first census of business was taken in 1930, covering 1929. Initially it covered retail and wholesale trade, and construction industries, but it was broadened in 1933 to include some of the service trades.

The 1954 economic censuses were the first to be fully integrated—providing comparable census data across economic sectors, using consistent time periods, concepts, definitions, classifications, and reporting units. These were the first censuses to be taken by mail, using lists of firms provided by the administrative records of other federal agencies. Since 1963, administrative records have also been used to provide basic statistics as well for very small firms, reducing or eliminating the need to send them census questionnaires. The Enterprise Statistics Program, which publishes combined data from the economic censuses, was made possible with the implementation of the integrated census program in 1954.

The range of industries covered in the economic censuses has continued to expand. The Census of Construction Industries began on a regular basis in 1967, and the scope of service industries was broadened in 1967, 1977, and 1987. The Census of Transportation began in 1963 as a set of surveys covering travel, transportation of commodities, and trucks. New for 1987 are publications reporting on business establishments engaged in several transportation industries, paralleling the data on establishments in

other sectors. This is part of a gradual expansion in coverage of industries previously subjected to government regulation. The Survey of Minority-Owned Business Enterprises was first conducted as a special project in 1969 and was incorporated into the economic censuses in 1972 along with the Survey of Women-Owned Businesses.

Economic censuses have also been taken in Puerto Rico since 1909, in the Virgin Islands and Guam since 1958, and in the Northern Mariana Islands since 1982.

Statistical reports from the 1982 and earlier censuses provide historical figures for the study of long-term time series, and are available in some large libraries. All of the census data published since 1967 are still available for sale on microfiche from the Census Bureau.

## **AVAILABILITY OF MORE FREQUENT ECONOMIC DATA**

While the censuses provide complete enumerations every 5 years, there are many needs for more frequent data as well. The Census Bureau conducts a number of monthly, quarterly, and annual surveys, the results of which appear in publication series such as *Current Construction Reports* (building permits, housing starts, and value of new construction put in place), *Current Business Reports* (retail and wholesale trade and service industries), the *Annual Survey of Manufactures*, *Current Industrial Reports*, and the *Quarterly Financial Report*. Most of these surveys, while providing more frequent observations, yield less kind-of-business and geographic detail than the censuses. The *County Business Patterns* program offers annual statistics on the number of establishments, employment, and payroll classified by industry within each county.

## **SOURCES FOR MORE INFORMATION**

More information about the scope, coverage, classification system, data items, and publications for each of the economic censuses and related surveys is published in the *Guide to the 1987 Economic Censuses and Related Statistics*. More information on the methodology, procedures, and history of the censuses will be published in the *History of the 1987 Economic Censuses*. Contact Customer Services for information on availability.

## **CENSUS OF CONSTRUCTION INDUSTRIES—SCOPE AND CLASSIFICATION**

The 1987 Census of Construction Industries covers all employer establishments (establishments with payroll) primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property



into lots as defined in the 1987 Standard Industrial Classification (SIC) Manual.<sup>1</sup> This industrial classification system has been developed by experts on classification in government and private industry under the guidance of the Office of Management and Budget and is in general use among government agencies and among organizations outside the government.

**Contract construction**—The SIC manual defines construction in three broad types of activity that follow:

1. **Building construction by general contractors or by operative builders**—General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other building projects. Operative builders who build on their own account for sale are also included here. However, investment builders who build structures on their own account for rent are classified in Real Estate.
2. **Heavy construction general contractors**—Heavy construction general contractors are primarily engaged in the construction of highways, bridges, pipelines, sewers and water lines, marine construction, power, and petro-chemical plants and other nonbuilding construction projects. Special trade contractors are classified in heavy construction if they are specifically engaged in the following activities: grading for highway and airport runways; guardrail construction; installation of highway signs; asphalt and concrete construction of roads, highways, streets and public sidewalks; trenching, cable laying; conduit construction; underwater rock removal; pipeline wrapping; or land clearing and leveling.
3. **Construction by other special trade contractors**—These contractors include plumbers, painters, carpenters, electricians, brick layers, roofers, etc. For the most part, they perform their work at the site of construction, although they may also have shops where they perform work incidental to the job site.

General contractors in both the building and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others all of the actual construction work or those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors, for other subcontractors, or may work directly for the owner of the property.

In addition to the industries classified in the SIC manual as Construction, this census also includes one industry

classified in the Real Estate area, SIC 6552, Land Subdividers and Developers, Except Cemeteries. These establishments are engaged in subdividing real property into lots and in developing it for sale on their own account.

Each establishment receiving a questionnaire was requested to report the percent of total dollar value of business done for each kind-of-business activity engaged in during 1987. This information was used for the computer assignment of appropriate industry classifications. During this work, various tests were also made using other data reported on the questionnaire. The proportion of construction work to total business was checked to verify that the establishment was primarily in construction. Also taken into consideration were the types of structures worked on during the year and the extent of work undertaken for other contractors.

Construction establishments often engage in various construction activities. It is necessary, however, to assign a single industry code to the establishment based on its major activity. Therefore, the statistics shown for an industry reflect not only the primary activity of the establishments in the industry, but also their secondary activities. The industry reports, however, do present data on the extent of secondary activities.

A revised edition of the SIC Manual was issued in 1987. Minor modifications were made to three industries in the construction sector: SIC 1611, Highway and Street Construction Contractors, Except Elevated Highways; SIC 1629, Heavy Construction Contractors, N.E.C.; and SIC 1771, Concrete Work Special Trade Contractors. The extent of these modifications are explained in the specific texts for those industries. "Bridge tables" are also included showing selected data tabulated using both the previous classification system and the 1987 revision.

## ESTABLISHMENT BASIS OF REPORTING

The census of construction industries is conducted on an establishment basis. A "construction establishment" is defined as a relatively permanent office or other place of business where the usual business activities related to construction are conducted. With some exceptions, a relatively permanent office is one which has been established for the management of more than one project or job and which is expected to be maintained on a continuing basis. Such "establishment" activities include, but are not limited to estimating, bidding, purchasing, supervising, and operation of the actual construction work being conducted at one or more construction sites. Separate construction reports were not required for each project or construction site.

Companies with more than one construction establishment were required to submit a separate report for each such establishment operated during all or any part of 1987. The census of construction industries figures represent a summary of records for individual establishments rather than for companies. The census tabulations, therefore, differ from those prepared on a company basis.

<sup>1</sup>Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.



If an establishment engaged in construction and one or more distinctly different lines of economic activity (wholesale or retail trade, service, manufacturing, mining, etc.) at the same place of business, it was requested to file a separate report appropriate to each activity, provided that the activity was of substantial size and separate records were maintained or substantially accurate estimates could be prepared.

If a separate establishment report could not be prepared for each activity, then a construction report was requested covering all activities of that establishment providing that the 1987 value of construction work exceeded the gross receipts from each of its other activities.

Construction businesses with no payroll during 1987 (nonemployers) were not required to file census reports. Tabulation of data for these businesses are based on administrative records and are shown only in U.S. summary publications and the geographic area reports series. Refer to the section on "Sample Design" for details. Foreign construction activities were not included in this census.

## **SAMPLE DESIGN, ESTIMATION PROCEDURES, AND RELIABILITY OF ESTIMATES**

The companies included in the 1987 Census of Construction Industries were identified as part of an operation common to all 1987 Economic Censuses. Construction companies were divided into employers (companies with payroll) and nonemployers (companies without payroll). Statistical information for the employers was obtained in the census by a survey which included all medium size and large employers and a sample of the smaller ones. Census reports were not required from the nonemployers. Statistics on them were obtained from administrative records of other agencies of the Federal Government.

### **Employer Companies**

**Developing the sampling frame for employer companies**—This operation started with obtaining a list of all construction companies in the active records of the Internal Revenue Service (IRS) which were subject to payment of Federal Insurance Contributions Act taxes. The basic source for this list has been the Internal Revenue Service Business Master File, a comprehensive list of companies engaged in business activities in the United States. The file contains the name, address, and form of ownership of each company and also indicates whether or not the company is subject to the FICA. Each company in this file is assigned a unique employer identification (EI) number which it uses in filing its various reports with the IRS. The Social Security Administration (SSA) maintains a similar list using the same identification numbers, which also contains information on the industrial classification of each company. The Bureau of the Census obtained both of these lists and combined them.

Under special arrangements which safeguarded the confidentiality of the information, the Bureau also obtained administrative records data on payrolls and receipts and added these data to the combined list. The list, thus created from the IRS-SSA information, was a list of employer companies. However, for the 1987 Economic Censuses the basic reporting unit is the "establishment." Therefore, steps were taken to identify the individual establishments of those companies which operate more than one place of business. The information for making this determination was obtained by means of the Company Organization Survey (COS), an annual canvass of all known multiestablishment companies and large single-establishment companies. Thus, the 1987 Economic Census list for single-establishment employer companies was obtained from the IRS-SSA, but the list of establishments of multiestablishment employer companies was obtained directly from those companies in the COS. Refer to the section on "Establishment Basis for Reporting" for details.

In general, the IRS-SSA list provided sufficient industrial classification data to assign a company to the proper economic census, but there were a number of companies for which this information was inadequate or unavailable. A special form, NC-9923, General Schedule, was mailed to all such companies, requesting information on the nature of the company's activities. From the information reported, the company was given an industrial classification code and assigned to the appropriate economic census. Since construction companies found in this way were identified only after the regular census mailing had taken place, they were treated as a supplement to the basic list.

**Selecting the employer sample**—The sample was designed to provide reliable State and metropolitan area estimates for each construction industry. It consisted of all construction establishments in multiestablishment companies, all single-establishment companies with estimated total employment of 20 employees or more, and a probability sample of single-establishment companies with estimated employment of fewer than 20 employees.

Supplementing the sample were construction companies identified from the NC-9923, General Schedule. Also affecting the sample were the misclassified companies; i.e., companies included in the samples of other trade areas which reported they were construction companies and companies originally classified in construction which reported they were not construction companies.

Of the 533,000 single-establishment employer companies initially classified as construction companies, 147,000 were included in the sample. All of the 13,000 establishments of multiestablishment companies were included in the sample. There was a net increase in the sample of 60,000 establishments resulting from establishments originally unclassified (receiving the NC-9923) or misclassified.

The probability sample of the smaller single-establishment companies was a stratified random sample. Strata were formed from all establishments with the same initial four-digit SIC code, in the same State, in the same metropolitan



area or in the balance of the State, and in the same size class based on estimated total employment. If the four-digit SIC code for an establishment was incomplete, the establishment was placed in a stratum for miscellaneous companies. Because they were small, all companies were included in the sample for the following three industries: SIC 1622, Bridge, Tunnel, and Elevated Highway Construction Contractors; SIC 1795, Wrecking and Demolition Work Special Trade Contractors; and SIC 1796, Installation or Erection of Building Equipment Special Trade Contractors.

#### Estimation procedures for 1987 and 1982 data—

Since all larger employer companies and some smaller ones were included in the census, sample estimation was required only for the universe of companies not selected with certainty. The published statistics are the totals of the estimates for the sampled companies and the aggregates for the certainty companies. All estimates for 1987 and 1982 published here are simple unbiased estimates of the form:

$$x'_c = \sum_{i=1}^{n_c} x_i / p_i$$

where:  $x'_c$  is the simple unbiased estimate of a characteristic for a publication cell.

$x_i$  is the reported value of a characteristic for an individual establishment in the publication cell.

$p_i$  is the selection probability of that firm.

$n_c$  is the number of firms in the sample for the cell.

Data for certain characteristics were reported as a percentage of the dollar value of business done. Before this formula was applied to those characteristics, it was necessary to convert the reported percentages into dollars.

**Reliability of employer statistics**—Since the estimates for employer establishments in these reports are based on the samples, they are subject to sampling variability and may be expected to differ from results which would have been obtained if a complete census had been taken using the same forms and procedures. The sampling errors shown in the tables were estimated directly from the sample reports, using methods appropriate for the sample design and form of estimation used.

The relative standard error is a measure of sampling variability, i.e., the variation that might occur by chance because only a sample of the population is surveyed. As calculated for this report, the relative standard error also partially reflects the effect of random errors of response and processing, but it does not take into account the effect of any consistent biases due to those types of errors. The chances are about 68 out of 100 that an estimate from the

sample would differ from a complete census by less than the relative standard error. The chances are about 95 out of 100 that the difference is less than twice the relative standard error and about 99 out of 100 that it is less than 2-1/2 times the relative standard error. Individual estimates with large relative standard errors have been shown in the published tables. Any such estimates should be used with caution. The very large relative standard errors generally occur for the smaller estimates.

Relative standard errors have been calculated for all of the published statistics, although they are shown for each statistic only in the tables presenting detailed statistics. Other tables show relative standard errors only for certain characteristics because of lack of space.

As calculated for this report, the relative standard error measures certain nonsampling errors, but does not measure any systematic biases in the data. Bias is the difference, averaged over all possible samples with the same size and design, between the estimates and the true value being estimated. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing the data. Although no direct measurements of the biases have been obtained, it is believed that most of the important response and operational errors were detected in the course of reviewing the data for reasonableness and consistency.

A potential source of bias is in the imputation for those establishments that have not responded by the time of final publication. Data were estimated for establishments that did not report by that date, although selected establishments were contacted again to obtain as much information on the telephone as possible. Some publication cells in which more than 40 percent of the data were not reported have been suppressed.

#### Nonemployer Companies

As described earlier, the information derived from the business income tax returns of all companies was matched to the census employer file on the basis of common identification numbers. Those business income tax returns which could not be matched, were further classified on the basis of several characteristics. Returns with characteristics consistent with companies without payroll were treated as nonemployers. The nonemployer construction companies were not required to file census reports.

For "number of establishments," each separate income tax return was assumed to be an establishment. "All business receipts", referred to in the tables as "dollar value of business done", was based on receipts information reported on the tax return.

Since no sampling was involved in the nonemployer establishments, the statistics for nonemployers are not subject to sampling variability. However, these data are subject to an unknown amount of reporting and processing errors which could not be detected by the Census Bureau.



## CENSUS REPORT FORMS

Information for the 1987 Census of Construction Industries was obtained from employer establishments primarily through the use of twenty-four questionnaires, determined by industry classification and size. Standard forms and short forms were developed for each of the following SIC groups: 15, 16, 171, 172, 173, 174, 175, 176, 177, 178, and 179 and for the establishments classified in SIC 6552. Establishments with 50 or more employees all received the standard form. A sub-sample of establishments with fewer than 50 employees received short forms instead of the standard forms. The short forms covered only major items and omitted some of the detail found in the longer forms.

In reviewing and developing the questionnaires, comments and recommendations were elicited from construction trade associations and appropriate advisory groups. The Bureau surveyed several thousand firms representing all economic activities to gain insight into the way companies maintain records and to see whether new information could be collected.

## DATA PROCESSING

The 1987 census report forms were mailed out in December 1987. They were mailed from and returned to the Census Bureau's Data Preparation Division in Jeffersonville, Ind., where routine editing and coding of the report forms were also accomplished. Collection of these report forms was essentially completed in July 1988.

The returned reports underwent extensive processing. A preliminary edit done at the time of data entry identified obviously deficient reports and reports needing clarification. When necessary, these problems were resolved by further contact with the respondents. Next, the data were transmitted to Census Bureau headquarters near Washington, DC.

Data records, then, underwent a detailed computer review and analysis. The records containing significant problems were referred for further analytical review and, if necessary, contacts were made with the respondents. The computer performed most classification coding (such as industry coding, geographic coding, and size coding), and imputation for missing items or for reports not received in time for tabulation. The imputation was performed on an industry (or industry group)-State (or geographic group) basis using all available response and administrative data.

The data records were then tabulated on an industry basis. Industry totals were subjected to analytical review, and selected statistics were prepared for the preliminary reports. Corrections resulting from this review were made to the computer records and final tabulations were produced.

The review of a preliminary report for an industry often uncovered the need for corrections or revisions to the data for another industry for which a preliminary report had already been published. The final reports incorporate all

revisions and corrections made during the review of the preliminary reports and contain considerable more data than were published in those reports.

## GEOGRAPHIC CLASSIFICATION

Information for the 1987 Census of Construction Industries' final industry report series is classified on the basis of two types of geographic distributions: (1) physical location of the establishment, and (2) location of construction work. A separate code was assigned on each basis allowing us to present data by both physical locations of the establishment and location of construction work.

The geographic area reports series presents similar data by industry for each State (physical location of the establishment) and for selected MSA's, CMSA's and PMSA's.

## DUPLICATION IN VALUE OF CONSTRUCTION WORK

The aggregate of value of construction work reported by all construction establishments in each of the several industry, geographic area, or other groupings in this census, contains varying amounts of duplication, since the construction work of one firm may be subcontracted to other construction firms and also be included in the subcontractors' value of construction work. To avoid this duplication, a "net" value of construction work figure has been derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work.

Duplication in value of business between other construction and nonconstruction industries, results from the use of products of these other industries as input materials by construction establishments. "Value added," avoids this duplication and is, for most purposes, the best measure for comparing the relative economic importance of industries or areas. "Value added," is defined in the 1987 Census of Construction Industries as equal to dollar value of business done less costs for construction work subcontracted to others and payments for materials, components, supplies, and fuels. However, for SIC 6552 and SIC 1531 where land receipts are significant, land receipts are also subtracted from dollar value of business done.

## SPECIAL TABULATIONS

Special tabulations of data collected in the 1987 Census of Construction Industries may be obtained on computer tape or in tabular form. The data will be in summary form and subject to the same rules prohibiting disclosure of confidential information (including name, address, kind of business, or other data for individual business establishments or companies) as are the regular publications.

Special tabulations are prepared on a cost basis. A request for a cost estimate, as well as exact and detailed specifications of the type and format of the data to be provided, should be directed to the Chief, Construction Statistics Division, Bureau of the Census, Washington, DC, 20233.



To discuss a special tabulation before submitting specifications, call 301-763-7546.

## COMPARABILITY OF CENSUS OF CONSTRUCTION INDUSTRIES DATA WITH OTHER DATA

Data contained in the reports of the 1987 Census of Construction Industries are not the same as the data published in the Census Bureau's monthly Construction Reports, Series C30, Value of New Construction Put in Place. The main difference is that the C30 series covers all new construction put in place without regard to who is performing the construction activity, whereas the construction census figures cover both new construction and maintenance and repair work done by establishments classified in the construction industry. Significant amounts of construction are done by establishments classified outside of construction (in real estate, manufacturing, utilities and communications, for example), both as "force account" construction and construction done for others. In addition, the value in place series includes construction-related expenses such as architectural and engineering costs and the costs of materials supplied by owners which are normally not reflected in the Census of Construction.

Data contained in the reports of the census of construction industries may also differ from industry data in "Employment and Earnings Statistics," published by the Bureau of Labor Statistics, and "Statistics of Income," published by the Internal Revenue Service. These differences arise from varying definitions of scope, coverage, timing, classification, and methodology.

## ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in this publication:

*	Sampling error exceeds 40 percent.
**	Represents the sum of all employees during pay periods including 12th of March, May, August, and November, divided by 4.
-	Represents zero.
†	Represents value of construction work less costs for construction work subcontracted to others. (See Duplication in Value of Construction Work.)
††	Represents dollar value of business done less costs for construction work subcontracted to others, and costs for materials, components, supplies, and fuels. In SIC's 1531 and 6552, land receipts are also subtracted from dollar value of business done. (See Duplication in Value of Construction Work.)
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate, associated relative standard error, or a consistency review.
(W)	Greater than zero but less than 1 percent.
(X)	Not applicable.
n.s.k.	Not specified by kind.

# Users' Guide for Locating Statistics in This Report by Table Number

Statistics	By State	By Industry	By employment size	By size class of the dollar value of business done	By type, class, ownership, kind of business, and location of construction <sup>1</sup>	By CMSA, PMSA, and MSA <sup>2</sup>
Assets and depreciation (gross book value):						
Beginning of year—buildings, machinery and equipment.....	5					
End of year—total.....	3, 5	3	7	8		
End of year—buildings, machinery and equipment.....	5					
Depreciation charges during year—buildings, machinery and equipment.....	5					
Capital expenditures:						
Total capital expenditures.....	3, 5	3	7	8		12
New buildings—machinery and equipment.....	5					
Used buildings—machinery and equipment.....	5					
Communication services, payments for.....	4					
Employees:						
All employees—average number.....	3	3	7	8		12
Construction workers—average number.....	3, 4, 10	3, 10				
Other employees—average number.....	4					
Employer costs for fringe benefits—legally required and voluntary expenditures.....	4					
Establishments:						
Number in business at end of year.....	4					
Number in business during year:						
All.....		1		2		
With payroll.....	3, 4, 6, 10	1, 3, 10	7	2, 8		12
Without payroll.....		1		2		
Hours—construction workers:						
Total.....	3, 4, 10	3, 10	7	8		
Quarterly.....	4, 10	10				
Inventories.....	6					
Materials, components, supplies, and fuels—payments for.....	3, 4	3	7	8		12
Payroll:						
First quarter, all employees.....	4					
Annual:						
All employees.....	3, 4	3	7	8		12
Construction workers.....	3, 4	3				
Other employees.....	4					
Power, fuels, and lubricants—payments for.....	4					
Proprietors and working partners:						
All establishments.....		1		2		
Establishments with payroll.....	4	1		2		
Establishments without payroll.....		1		2		
Ratios, industry.....	11	11				
Receipts:						
Dollar value of business done:						
All establishments.....		1		2		
Establishments with payroll.....	4	1	7	2, 8		
Establishments without payroll.....		1		2		
Value of construction work, total.....	3, 4, 6	3	7	8	4, 9,	12
For work subcontracted in from others.....	4					
Other business receipts.....	4					
Land receipts <sup>3</sup> .....	4					
Net value of construction work.....	3, 4	3	7	8		12
Value added.....	3, 4	3	7	8		12
Rental payments:						
Total.....	3, 4	3	7	8		
For machinery and equipment.....	4					
For buildings.....	4					
Repairs to buildings and other structures.....	4					
Repairs to machinery and equipment.....	4					
Subcontract work to others, payments for.....	3, 4	3	7	8	12	

Note: Data for 1982 and earlier years are also available in some of these tables.

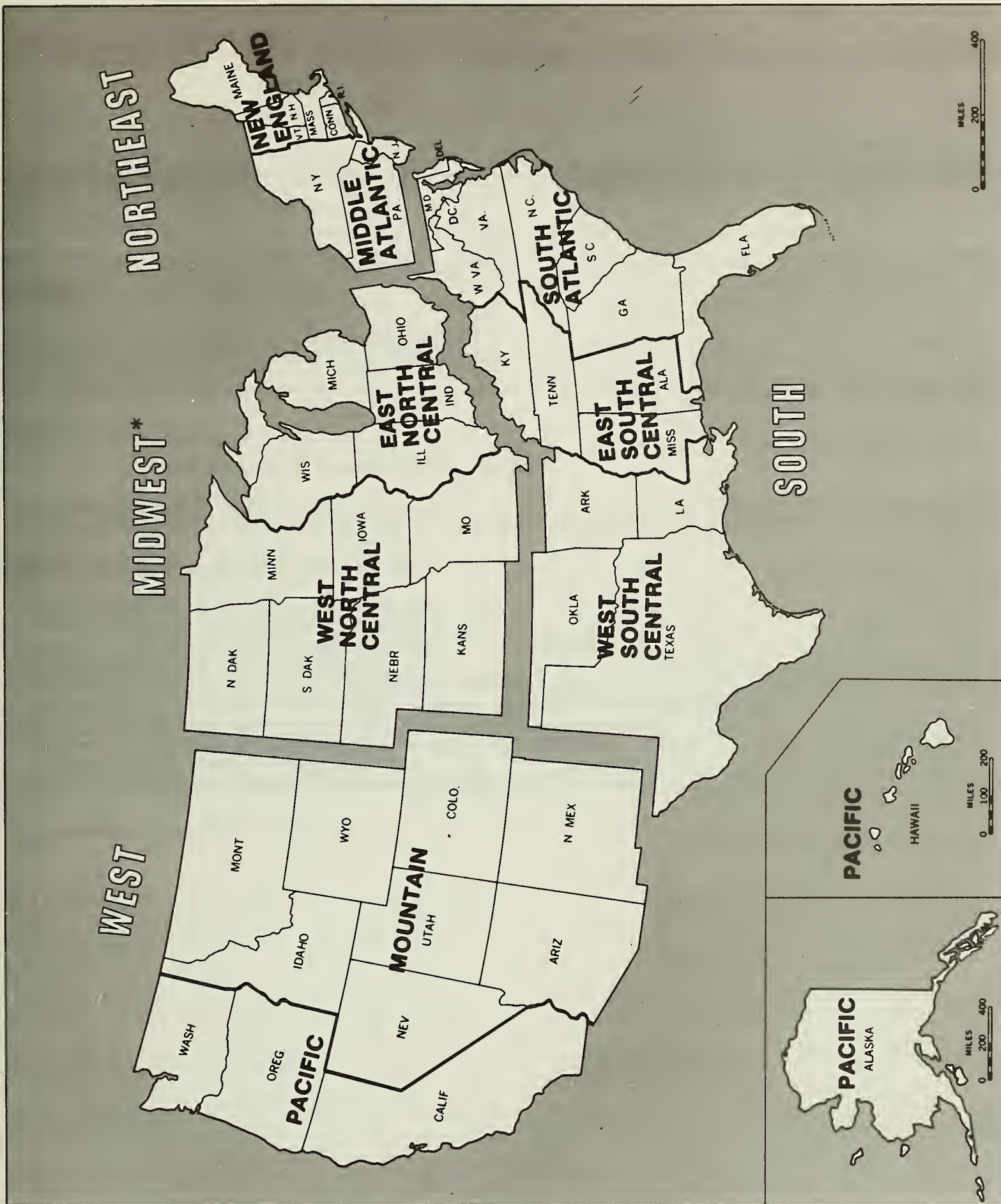
<sup>1</sup>Type—buildings, roads, etc. Class—new construction; additions, alterations, or reconstruction; or maintenance and repair work. Ownership—private or government owned.

<sup>2</sup>CMSA—Consolidated metropolitan statistical area; PMSA—Primary metropolitan statistical area; MSA—Metropolitan Statistical area.

<sup>3</sup>Land receipts are shown separately for SIC's 1531 and 6552 only.



REGIONS AND CENSUS DIVISIONS OF THE UNITED STATES





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## Alaska

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--Not applicable for this report.



# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Alaska. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 5,227 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$1.9 billion in total value of business done.

Most of the 5,227 construction establishments were small. Of the total, 3,720 were nonemployers, and over half of the employer establishments had less than 5 employees. The 585 construction establishments with 5 employees or more, while representing only 11 percent of all establishments, accounted for more than 83 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$1.73 billion on total dollar value of business done. Of this amount, \$1.68 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$329 million, leaving net value of construction work of \$1.4 billion. In addition, these establishments paid out \$571 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$932 million. (See Introduction and appendixes for explanation of terms.)

There were 1,507 establishments with total employment averaging 12,764 during the year. Total payroll for 1987 was \$428 million. Total hours worked by construction workers during the year were 17.7 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.



Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 3,720 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$162 million. Most of these establishments, about 69 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987   
1982 

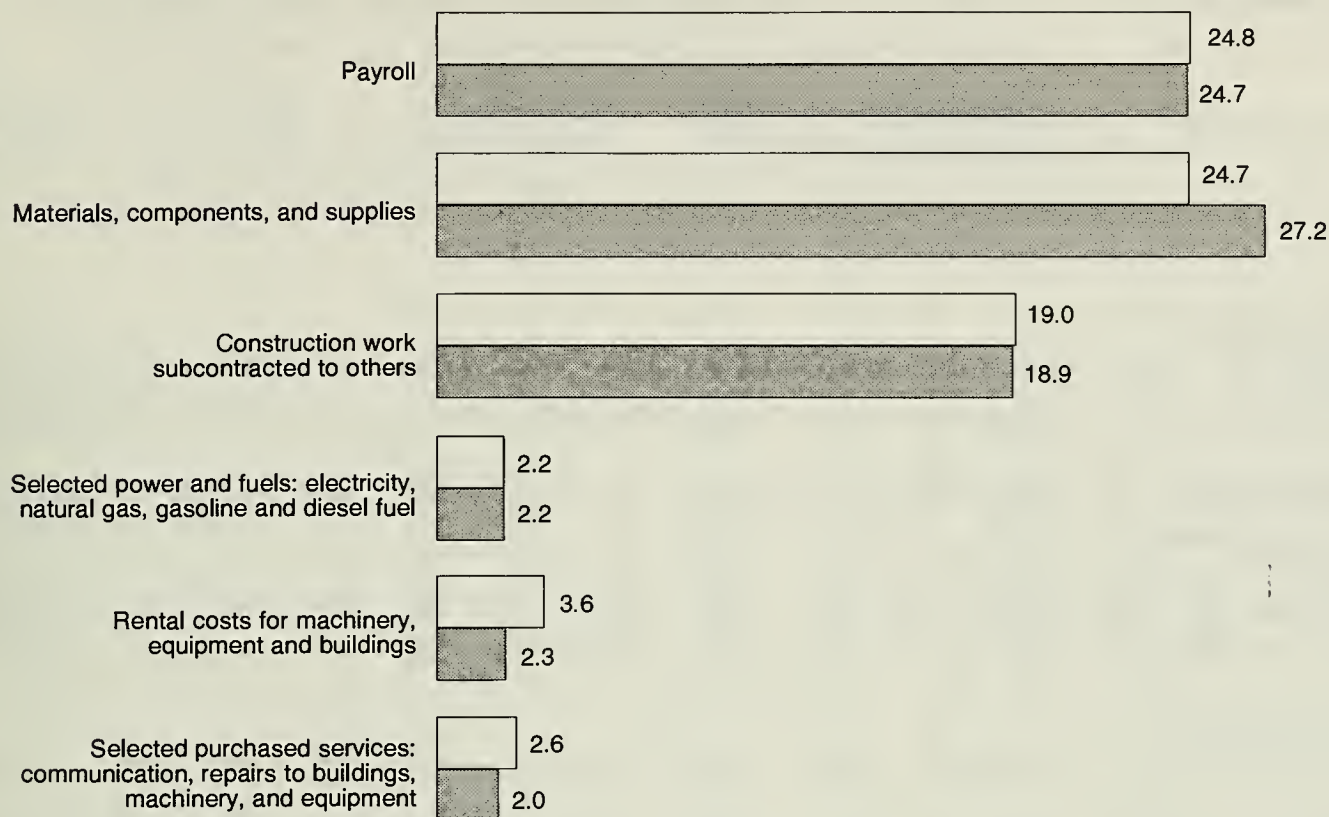


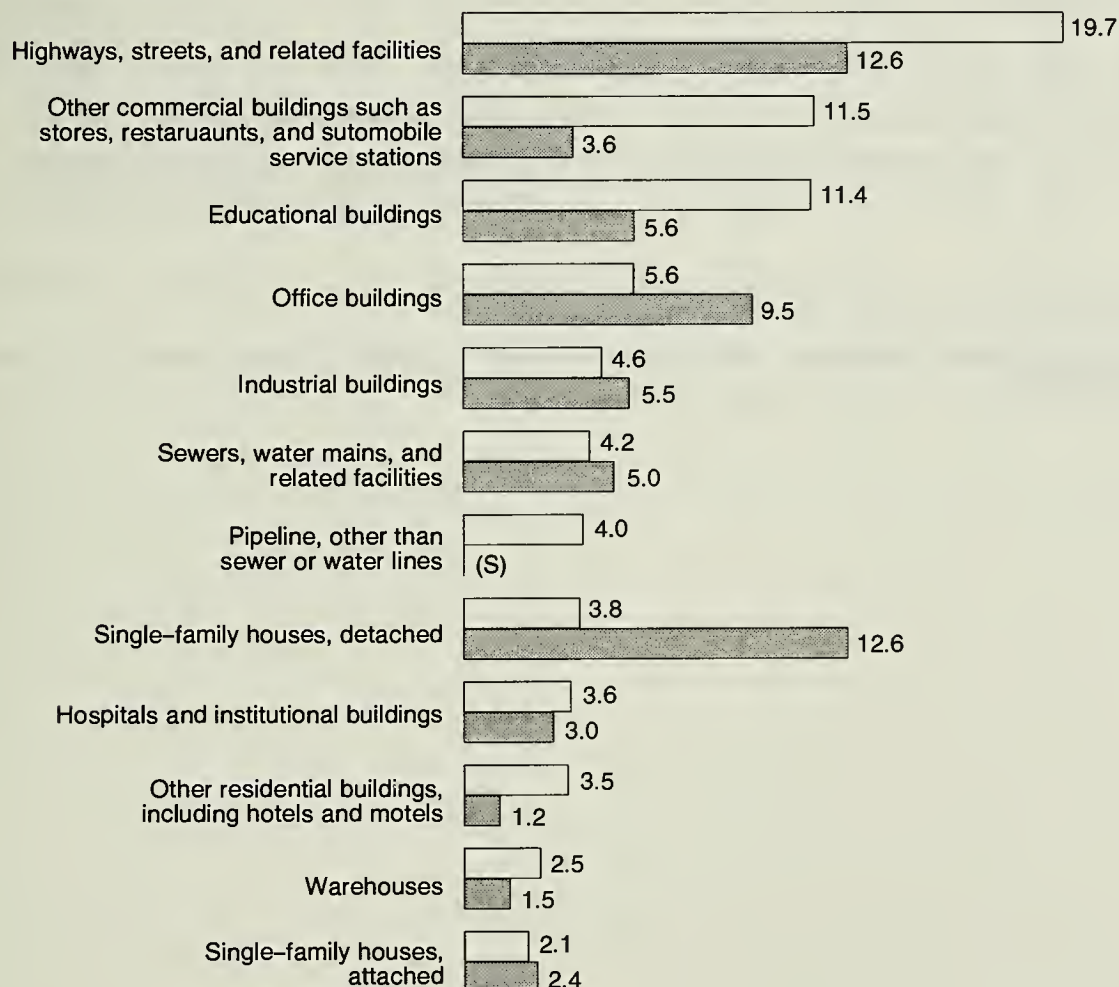


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987   
1982 





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprietors and working partners	All employees**	Dollar value of business done.	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done¹	J	K
		A	B	C	D	E	F	G	H	I	J			
	1987													
	Construction Industries and land subdividers and developers -----	5 227	4 115	12 764	1 888 839	3 720	3 720	162 292	1 507	395	12 764	1 726 547	2	2
15, 16, 17	Construction Industries -----	5 033	3 880	12 741	1 871 402	3 541	3 489	145 887	1 492	391	12 741	1 725 515	2	2
15	Building construction—General contractors and operative builders ----	1 246	855	4 440	703 729	838	769	52 073	408	86	4 440	651 656	5	4
16	Heavy construction other than building construction— contractors-----	364	183	(D)	(D)	142	139	11 933	222	44	(D)	(D)	(D)	(D)
17	Special trade contractors -----	3 423	2 842	(D)	(D)	2 561	2 581	81 880	862	261	(D)	(D)	(D)	(D)
1711	Plumbing, heating, and air-conditioning --	402	246	871	116 236	229	228	9 295	173	18	871	106 941	8	8
1731	Electrical work-----	308	211	917	108 355	161	155	5 960	147	56	917	102 395	5	5
6552	Land subdividers and developers, n.e.c.²-----	184	(S)	(S)	(S)	179	231	16 405	*7	(S)	(S)	(S)	(S)	(S)
	1982													
	Construction Industries and land subdividers and developers -----	5 739	4 686	22 229	2 473 639	3 982	4 087	307 606	1 757	599	22 229	2 166 033	1	1
15, 16, 17	Construction Industries -----	5 580	4 509	22 046	2 433 059	3 850	3 915	280 994	1 730	594	22 046	2 152 065	1	1
15	Building construction—General contractors and operative builders ----	1 859	1 400	5 543	860 294	1 233	1 249	142 838	626	151	5 543	717 458	3	2
16	Heavy construction other than building construction— contractors-----	411	309	6 322	655 368	253	264	19 913	158	45	6 322	635 455	1	1
17	Special trade contractors -----	3 310	2 800	10 181	917 397	2 364	2 402	118 243	946	398	10 181	799 154	2	2
1711	Plumbing, heating, and air-conditioning --	344	248	1 876	171 940	206	211	11 843	138	37	1 876	160 097	4	6
1731	Electrical work-----	330	274	3 452	249 569	138	134	10 534	192	*140	3 452	239 035	2	3
6552	Land subdividers and developers, n.e.c.²-----	155	175	178	40 577	132	172	26 612	23	(S)	178	13 965	24	17

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

<sup>1</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

<sup>2</sup>For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.



**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
<b>The State</b> .....	5 227	4 115	12 764	1 888 839	3 720	3 720	162 292	1 507	395	12 764	1 726 547	2	2
\$10,000,000 or more .....	26	4	4 381	668 160	-	-	-	26	4	4 381	668 160	(W)	(W)
\$5,000,000 to \$9,999,999 .....	32	-	1 211	223 877	-	-	-	32	-	1 211	223 877	(W)	(W)
\$2,500,000 to \$4,999,999 .....	73	10	1 372	(D)	2	1	(D)	71	9	1 372	251 733	5	7
\$1,000,000 to \$2,499,999 .....	179	21	1 936	539 919	11	9	21 771	168	12	1 936	266 415	12	11
\$500,000 to \$999,999 .....	263	82	1 742	185 016	26	21	17 388	237	61	1 742	167 628	11	10
\$250,000 to \$499,999 .....	(S)	(S)	(S)	(S)	67	65	22 470	(S)	(S)	(S)	(S)	(S)	(S)
\$100,000 to \$249,999 .....	(S)	(S)	(S)	(S)	242	236	37 150	(S)	(S)	(S)	(S)	(S)	(S)
\$50,000 to \$99,999 .....	575	478	243	40 852	380	382	26 737	195	96	243	14 115	19	16
\$25,000 to \$49,999 .....	(S)	(S)	(S)	(S)	518	518	18 087	(S)	(S)	(S)	(S)	(S)	(S)
Less than \$25,000 .....	(S)	(S)	(S)	(S)	2 474	2 488	18 689	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	732	740	12 218	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	535	527	3 909	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	460	469	1 683	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 .....	(NA)	(NA)	(NA)	(NA)	747	752	879	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
<b>The State</b> .....	5 739	4 686	22 229	2 473 639	3 982	4 087	307 606	1 757	599	22 229	2 166 033	1	1
\$10,000,000 or more .....	34	10	8 171	832 490	-	-	-	34	10	8 171	832 490	(W)	(W)
\$5,000,000 to \$9,999,999 .....	53	4	3 487	(D)	-	-	-	53	4	3 487	(D)	(W)	(D)
\$2,500,000 to \$4,999,999 .....	80	19	2 359	660 901	9	9	31 153	71	10	2 359	629 748	(W)	(W)
\$1,000,000 to \$2,499,999 .....	244	81	2 913	375 941	36	40	50 104	208	41	2 913	325 837	5	6
\$500,000 to \$999,999 .....	313	128	2 161	221 948	60	58	41 169	253	70	2 161	180 779	8	8
\$250,000 to \$499,999 .....	443	245	1 511	160 227	154	163	54 740	289	82	1 511	105 487	9	9
\$100,000 to \$249,999 .....	857	685	1 063	136 251	409	435	64 461	448	250	1 063	71 790	9	11
\$50,000 to \$99,999 .....	607	492	330	43 140	410	435	28 811	197	57	330	14 329	14	10
\$25,000 to \$49,999 .....	632	591	131	22 439	524	536	18 300	108	55	131	4 139	19	15
Less than \$25,000 .....	2 474	2 431	101	20 300	2 380	2 411	18 868	94	*20	101	1 432	14	18
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	811	819	12 843	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	573	580	4 010	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	548	558	1 567	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 .....	(NA)	(NA)	(NA)	(NA)	448	454	448	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	<b>Construction Industries and land subdividers and developers -----</b>	<b>1 507</b>	<b>12 764</b>	<b>10 091</b>	<b>428 265</b>	<b>307 897</b>	<b>17 677</b>	<b>1 680 844</b>	<b>1 351 935</b>
15, 16, 17	<b>Construction Industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses -----	195	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings -----	12	185	154	5 845	3 364	225	29 761	16 117
1531	Operative builders -----	*22	*29	(S)	714	(S)	(S)	7 552	*5 639
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	43	361	246	12 375	8 709	406	55 960	39 303
1542	Nonresidential buildings, n.e.c. -----	136	2 769	2 074	100 719	57 010	3 791	426 884	304 552
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction -----	84	1 803	1 529	87 200	71 023	3 253	349 103	288 715
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	50	969	820	29 605	24 586	1 519	138 542	123 140
1629	Heavy construction, n.e.c. -----	86	1 142	934	42 750	27 675	1 432	109 420	96 679
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning -----	173	871	632	26 623	19 094	1 199	104 971	86 851
1721	Painting and paper hanging -----	66	263	230	6 665	5 843	357	20 807	19 107
1731	Electrical work -----	147	917	680	34 410	25 927	1 184	101 691	98 721
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	6	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work -----	49	315	257	11 012	9 163	406	27 207	26 199
1743	Terrazzo, tile, marble, and mosaic work -----	*12	(D)	*31	(D)	*1 134	*55	4 331	*4 233
175	Carpentry and floor work:								
1751	Carpentry -----	49	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work -----	30	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work -----	32	215	176	6 799	4 904	266	27 073	26 012
1771	Concrete work -----	53	264	216	5 435	4 685	268	21 222	19 595
1781	Water well drilling -----	6	46	38	1 100	860	58	4 372	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	24	184	160	4 701	4 401	254	15 134	14 171
1793	Glass and glazing work -----	10	76	50	1 996	1 222	82	5 374	(D)
1794	Excavation work -----	96	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	8	47	34	2 184	1 719	65	7 220	(D)
1799	Special trade contractors, n.e.c. -----	99	545	413	14 552	11 330	767	39 237	37 232
6552	<b>Land subdividers and developers, n.e.c. -----</b>	<b>*7</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(D)</b>	<b>(S)</b>

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
932 139	464 400	328 908	62 247	17 288	297 892	22 229	2 055 137	1 101 841	2	2	7	15, 16, 17
												15
(S) 9 926	(S) 7 959	(S) 13 643	(S) 191	(S) 102	(S) 850	(S) (S)	(S) (S)	(S) (S)	(S) 16	(S) 11	(S) 26	152 1521 1522
1 712	(S)	*1 912	(S)	(S)	(D)	458	73 341	12 488	63	65	(S)	1531
25 622 204 992	(D) 104 395	16 656 122 331	632 6 279	1 376 1 794	9 186 29 149	812 2 123	55 225 358 099	24 416 127 309	15 3	15 5	8 10	154 1541 1542
												16
216 423	82 756	60 387	34 192	3 933	106 766	2 298	243 896	144 999	3	4	10	1611
(D) 84 069 68 186	(D) 40 544 35 279	(D) 15 401 12 741	(D) 3 792 3 932	(D) 1 589 1 992	(D) 22 719 34 821	448 1 546 2 030	32 148 154 356 172 292	10 620 80 019 140 167	(D) 4 10	(D) 5 7	(D) 5 11	162 1622 1623 1629
												17
54 019	34 801	18 120	2 100	301	8 798	1 876	150 235	74 557	8	9	18	1711
14 909	4 218	1 700	278	782	2 497	248	17 880	11 792	12	12	17	1721
64 367	35 057	*2 969	2 526	621	21 575	3 452	234 373	152 915	5	5	36	1731
(S) 20 480 *2 449	(S) 5 963 (D)	(S) 1 007 98	(D) 786 (S)	(S) (D) -	(S) 2 514 (S)	(S) 777 (D)	(S) 48 023 (S)	(S) 24 179 (D)	(S) 10 (D)	(S) 10 55	(S) (D) -	174 1741 1742 1743
(S) (S)	(S) (S)	(S) (S)	(S) (D)	(S) (S)	(S) (S)	299 130	22 746 11 827	13 591 4 312	(S) (S)	(S) (S)	(S) (S)	175 1751 1752
14 152	(D)	1 061	238	247	4 675	535	40 285	22 510	8	5	11	1761
12 340	7 444	1 626	729	120	4 632	(D)	42 207	(D)	20	14	34	1771
3 142	1 286	(D)	*70	*168	3 227	(S)	(S)	(S)	16	(D)	57	1781
11 204 3 237 (S) (D) 5 086 33 716	(D) 3 505 (S) (D) 2 094 7 947	963 (D) (S) (D) (D) 2 004	743 174 (S) (D) 81 918	(D) - (S) (D) (D) *730	(D) 338 (S) (D) 318 6 192	(S) 97 1 412 (D) 98 (S)	(S) 6 310 126 323 (D) 11 586 (S)	(S) 4 478 102 241 (D) 9 181 (S)	5 2 (S) (D) (W) 16	7 (D) (S) (D) (D) 15	(D) - (S) (D) (D) 42	179 1791 1793 1794 1795 1796 1799
(D)	(D)	(D)	(S)	(S)	(S)	178	8 703	5 727	(S)	(S)	(S)	6552



# Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	1 507	1 757	1 396	1 055	3	4	5	7
Proprietors and working partners .....	395	599	814	647	12	17	10	9
All employees** .....	12 764	22 229	16 855	6 836	2	1	1	5
Construction workers:								
March .....	8 400	13 771	11 574	3 192	3	1	1	6
May .....	10 565	17 266	15 139	5 593	3	2	2	7
August .....	12 124	22 636	17 474	8 575	3	1	2	6
November .....	9 276	17 189	13 429	5 486	3	2	2	5
Average .....	10 091	17 824	14 417	5 840	3	1	1	5
Other employees:								
March .....	2 510	4 336	2 226	875	2	2	3	5
May .....	2 705	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
August .....	2 890	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
November .....	2 586	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Average .....	2 673	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	3 449	4 972	(NA)	(NA)	3	2	(NA)	(NA)
April to June .....	4 649	6 063	(NA)	(NA)	3	2	(NA)	(NA)
July to September .....	5 428	8 053	(NA)	(NA)	3	2	(NA)	(NA)
October to December .....	4 150	6 231	(NA)	(NA)	3	2	(NA)	(NA)
Total hours worked .....	17 677	25 320	(NA)	(NA)	3	1	(NA)	(NA)
Payroll, all employees .....	428 265	534 677	463 639	100 422	2	1	1	4
Payroll, construction workers .....	307 897	433 377	399 045	85 009	2	1	1	4
Payroll, other employees .....	120 368	101 300	64 594	15 413	2	1	1	4
First quarter payroll, all employees .....	87 882	99 917	79 707	(NA)	2	1	1	(NA)
Employer costs for fringe benefits, all employees .....	107 651	102 914	92 575	(NA)	2	1	1	(NA)
Legally required expenditures .....	77 727	77 750	43 116	(NA)	2	1	1	(NA)
Voluntary expenditures .....	29 923	25 164	49 459	(NA)	2	1	1	(NA)
Dollar value of business done .....	1 726 547	2 166 033	1 427 807	414 446	2	1	1	7
Value of construction work <sup>1</sup> .....	1 680 844	2 055 137	1 374 077	396 474	2	1	1	6
Value of construction work subcontracted in from others .....	303 621	435 134	250 291	72 289	6	10	(W)	(W)
Land receipts <sup>2</sup> .....	*1 098	17 156	(NA)	(NA)	47	5	(NA)	(NA)
Other business receipts .....	44 604	93 739	53 730	17 972	6	2	2	25
Net value of construction† .....	1 351 935	1 644 925	1 130 233	304 272	2	1	1	5
Value added†† .....	932 139	1 101 841	803 139	204 291	2	1	1	4
Selected costs .....	793 309	1 047 034	617 730	202 935	3	2	2	9
Materials, components, and supplies <sup>3</sup> .....	426 755	589 248	350 713	110 733	3	2	2	7
Construction work subcontracted to others .....	328 908	410 212	243 844	92 202	3	1	2	13
Selected power, fuels, and lubricants .....	37 644	47 574	23 173	(NA)	2	2	2	(NA)
Electricity .....	3 881	4 542	3 720	(NA)	3	3	3	(NA)
Natural gas .....	1 200	1 022	965	(NA)	4	4	8	(NA)
Gasoline and diesel fuel .....	29 012	39 345	15 491	(NA)	2	3	2	(NA)
On highway use .....	19 617	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use .....	9 394	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	3 550	2 664	3 002	(NA)	6	3	4	(NA)
Rental cost for machinery, equipment, and buildings .....	62 247	49 228	30 406	(NA)	2	4	4	(NA)
For machinery and equipment .....	52 179	40 802	26 018	16 946	2	5	4	26
For buildings .....	10 068	8 425	4 388	(NA)	6	3	3	(NA)
Selected purchased services .....	44 030	44 148	40 390	(NA)	4	2	4	(NA)
Communication services .....	7 808	6 799	4 193	(NA)	5	2	10	(NA)
Repairs to buildings and other structures .....	1 303	2 722	2 847	(NA)	5	2	3	(NA)
Repairs to machinery and equipment .....	34 918	34 625	33 351	(NA)	4	2	4	(NA)
Ownership of construction projects:								
Value of construction work .....	1 680 844	2 055 137	1 374 077	396 474	2	1	1	6
Government owned .....	1 059 102	790 828	328 154	210 247	3	2	1	7
Federal .....	374 668	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
State and local .....	684 434	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
Privately owned .....	621 741	1 264 308	1 045 923	186 227	5	2	1	11

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	308 128	430 843	5	2
Capital expenditures, other than land -----	17 288	50 330	7	3
New -----	9 946	30 389	5	3
Used -----	7 342	19 940	13	4
Retirements and disposition of depreciable assets -----	27 524	20 662	34	2
End-of-year gross book value of depreciable assets -----	297 892	460 510	3	2
Depreciation charges during year -----	31 442	60 803	5	2
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	43 899	84 366	10	3
Capital expenditures, other than land -----	2 154	4 153	22	6
New buildings and other structures -----	1 171	3 058	19	7
Used buildings and other structures -----	982	1 094	42	13
Retirements and disposition of depreciable assets -----	507	1 848	24	9
End-of-year gross book value of depreciable assets -----	45 545	86 671	11	3
Depreciation charges during year -----	3 274	11 015	9	4
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	264 229	346 477	5	2
Capital expenditures, other than land -----	15 134	46 177	5	3
New machinery and equipment, including automobiles and trucks -----	8 774	27 331	5	3
New automobiles and trucks, intended primarily for highway use -----	2 451	10 533	7	5
Used machinery and equipment, including automobiles and trucks -----	8 359	18 845	10	5
Retirements and disposition of depreciable assets -----	27 017	18 814	34	2
End-of-year gross book value of depreciable assets -----	252 346	373 839	3	2
Depreciation charges during year -----	28 187	49 788	5	2

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number .....	1 507	3
Value of construction work .....	1 680 844	2
Establishments with inventories:		
Number .....	563	8
Value of construction work .....	529 205	6
Inventories <sup>1</sup> :		
End of 1987, materials and supplies .....	12 252	8
End of 1986, materials and supplies .....	12 565	7
Establishments with no inventories:		
Number .....	814	7
Value of construction work .....	733 587	5
Establishments not reporting:		
Number .....	330	12
Value of construction work .....	418 052	3

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments .....	1 507	922	308	178	68	17	9	1	1	1
All employees** .....	12 764	1 627	1 976	2 312	1 995	1 137	1 435	2 279	(D)	(D)
Payroll, all employees .....	428 265	31 706	58 627	72 538	76 376	56 910	132 106	(D)	(D)	(D)
Construction worker hours (thousands) .....	17 677	1 952	2 580	2 565	3 103	1 804	2 232	3 439	(D)	(D)
Dollar value business done .....	1 726 547	161 662	254 774	339 407	332 720	223 157	169 986	244 839	(D)	(D)
Value of construction work <sup>1</sup> .....	1 680 844	157 719	244 436	328 337	322 331	383 180	(D)	244 839	(D)	(D)
Net value of construction work† .....	1 351 935	137 894	195 871	260 968	238 115	156 560	362 525	(D)	(D)	(D)
Value added†† .....	932 139	85 908	125 393	187 014	163 948	94 234	123 469	152 172	(D)	(D)
Cost of materials, components, supplies, and fuels .....	464 400	54 829	80 816	85 024	84 556	159 173	(D)	(D)	(D)	(D)
Cost of construction work subcontracted to others .....	328 908	19 825	48 564	67 368	84 216	108 934	(D)	(D)	(D)	(D)
Rental cost for machinery, equipment, and buildings .....	62 247	4 727	7 544	7 856	7 363	3 950	30 805	(D)	(D)	(D)
Capital expenditures, other than land .....	17 288	2 691	2 555	3 674	3 097	5 271	(D)	(D)	(D)	(D)
End-of-year gross book value of depreciable assets .....	297 892	45 800	43 524	55 457	76 858	42 613	33 639	(D)	(D)	(D)
<b>1982</b>										
All employees** .....	22 229	2 079	2 272	2 712	3 318	2 525	4 247	1 762	3 313	-
Value of construction work <sup>1</sup> .....	2 055 137	190 420	225 228	320 594	356 871	281 334	375 581	151 473	153 635	-
Value added†† .....	1 101 841	91 366	98 054	152 180	183 851	153 910	237 613	78 722	106 142	-
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** .....	2	7	8	9	9	(W)	(W)	(W)	(D)	(D)
Net value of construction work† .....	2	7	9	8	4	(W)	(W)	(D)	(D)	(D)
Capital expenditures, other than land .....	7	18	16	27	10	(W)	(D)	(D)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments -----	1 507	(S)	(S)	195	(S)	(S)	237	168	71	32	26
All employees** -----	12 764	(S)	(S)	243	(S)	(S)	1 742	1 936	1 372	1 211	4 381
Payroll, all employees -----	428 265	(S)	(S)	3 067	(S)	(S)	43 102	63 465	50 633	61 509	172 639
Construction worker hours (thousands) -----	17 677	(S)	(S)	225	(S)	(S)	1 941	2 475	1 937	2 118	6 682
Dollar value of business done -----	1 726 547	(S)	(S)	14 115	(S)	(S)	167 628	266 415	251 733	223 877	668 160
Value of construction work <sup>1</sup> -----	1 680 844	(S)	(S)	13 567	(S)	(S)	159 047	258 742	241 963	217 841	658 874
Net value of construction work† -----	1 351 935	(S)	(S)	12 909	(S)	(S)	134 717	213 703	187 598	171 590	515 751
Value added†† -----	932 139	(S)	(S)	8 339	(S)	(S)	89 171	140 584	129 917	129 075	360 934
Cost of materials, components, supplies, and fuels -----	464 400	(S)	(S)	5 031	(S)	(S)	53 665	80 792	67 450	48 551	164 103
Cost of construction work subcontracted to others -----	328 908	(S)	(S)	658	(S)	(S)	24 329	45 038	54 365	46 251	143 123
Rental cost for machinery, equipment, and buildings -----	62 247	(S)	(S)	*257	(S)	(S)	5 338	7 501	6 264	6 820	33 205
Capital expenditures, other than land -----	17 288	(S)	(S)	*101	(S)	(S)	2 855	3 609	2 268	2 690	4 551
End-of-year gross book value of depreciable assets -----	297 892	(S)	(S)	2 892	(S)	(S)	30 972	43 445	44 319	93 500	44 714
<b>1982</b>											
All employees** -----	22 229	101	131	330	1 063	1 511	2 161	2 913	2 359	3 487	8 171
Value of construction work <sup>1</sup> -----	2 055 137	1 414	3 976	14 061	70 117	100 387	169 931	309 647	242 976	357 161	785 465
Value added†† -----	1 101 841	832	2 002	8 040	36 198	55 644	76 102	155 742	126 883	181 740	458 654
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** -----	2	(S)	(S)	19	(S)	(S)	11	12	5	(W)	(W)
Net value of construction work† -----	2	(S)	(S)	17	(S)	(S)	10	11	7	(W)	(W)
Capital expenditures, other than land -----	7	(S)	(S)	49	(S)	(S)	20	26	20	1	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	1 680 844	1 041 287	361 296	141 398	2	2	6	7
<b>Building construction</b> .....	885 250	550 188	264 751	69 711	3	3	7	10
Single-family houses .....	99 231	64 660	23 543	11 027	8	10	14	15
Single-family houses, detached .....	63 913	(D)	19 997	(D)	11	(D)	15	(D)
Single-family houses, attached .....	35 318	(D)	3 546	(D)	5	(D)	36	(D)
Apartment buildings with two or more apartments .....	9 567	3 182	4 743	1 642	20	5	39	10
Other residential buildings, including hotels and motels .....	58 021	26 925	23 437	7 658	5	8	5	19
Hotels and motels .....	22 657	12 229	6 144	4 283	5	1	1	28
Other residential buildings, excluding hotels and motels .....	35 364	14 696	17 293	3 375	8	15	6	26
Office buildings .....	94 392	38 470	43 960	11 961	10	19	11	16
Other commercial buildings such as stores, restaurants, and automobile service stations .....	193 766	152 708	26 322	14 734	5	3	21	23
Industrial buildings and warehouses .....	119 820	78 337	32 257	9 224	6	8	7	32
Industrial buildings .....	78 042	50 824	19 583	7 634	8	11	8	39
Warehouses .....	41 778	27 513	12 674	1 590	6	5	14	17
Educational buildings .....	191 520	127 972	56 531	7 016	8	2	28	20
Hospitals and institutional buildings .....	59 653	30 790	26 760	2 102	11	12	21	9
Amusement, social, and recreational buildings .....	8 903	6 044	1 570	1 288	11	11	31	25
Other nonresidential buildings .....	49 777	21 100	25 628	3 059	9	12	10	9
Land development for buildings .....	(S)	(NA)	(NA)	(NA)	(S)	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	659 333	491 099	96 546	71 687	3	3	8	6
Highways, streets, and related facilities .....	331 236	255 196	45 420	30 620	4	5	9	7
Airport runways .....	5 749	*2 165	(D)	(D)	19	51	(D)	(D)
Parking areas including private driveways .....	8 471	*3 581	4 442	(S)	31	45	26	(S)
Bridges, tunnels, and elevated highways .....	15 385	15 226	(D)	(D)	(W)	(W)	(D)	(D)
Marine construction .....	8 347	8 187	(D)	(D)	(W)	(W)	(D)	(D)
Harbor and port facilities .....	32 533	28 237	1 734	*2 561	7	4	28	47
Power and communication transmission lines, towers, and related facilities .....	19 398	9 540	7 388	2 469	6	6	12	7
Sewers, water mains, and related facilities .....	69 920	49 703	15 418	4 798	10	11	27	19
Sewers, sewer lines, and related facilities .....	34 980	21 377	9 372	4 229	8	8	22	21
Water mains and related facilities .....	34 940	28 326	6 046	569	13	14	34	7
Pipeline, other than sewer or water lines .....	64 954	(D)	(D)	13 560	5	(D)	(D)	22
Blast furnaces, petroleum refineries, and chemical complexes .....	11 860	(D)	(D)	9 156	7	(D)	(D)	5
Earthmoving, nonbuilding .....	14 101	13 010	(S)	*635	18	14	(S)	47
Other nonbuilding construction .....	77 379	106 254	22 144	7 888	10	17	(W)	(W)
<b>Construction work, n.s.k.</b> .....	136 259	(NA)	(NA)	(NA)	13	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	2 055 137	1 767 004	(NA)	288 132	1	1	(NA)	2
<b>Building construction</b> .....	1 063 267	946 511	(NA)	116 756	2	2	(NA)	4
Single-family houses .....	308 889	274 412	(NA)	34 477	5	5	(NA)	8
Single-family houses, detached .....	259 130	228 860	(NA)	30 269	5	6	(NA)	9
Single-family houses, attached .....	49 759	45 551	(NA)	4 207	9	10	(NA)	13
Apartment buildings with two or more apartments .....	54 834	44 962	(NA)	9 871	8	7	(NA)	8
Other residential buildings, including hotels and motels .....	25 601	21 820	(NA)	3 780	10	12	(NA)	7
Office buildings .....	195 790	175 114	(NA)	20 676	3	3	(NA)	11
Other commercial buildings such as stores, restaurants, and automobile service stations .....	73 652	60 942	(NA)	12 709	4	5	(NA)	8
Industrial buildings and warehouses .....	144 909	128 607	(NA)	16 301	4	3	(NA)	9
Industrial buildings .....	113 165	100 792	(NA)	12 372	4	4	(NA)	7
Warehouses .....	31 744	27 815	(NA)	3 928	9	9	(NA)	25
Educational buildings .....	114 988	104 687	(NA)	10 301	4	4	(NA)	7
Hospitals and institutional buildings .....	60 762	56 359	(NA)	4 402	4	4	(NA)	5
Amusement, social, and recreational buildings .....	34 899	33 380	(NA)	1 518	2	2	(NA)	5
Other nonresidential buildings .....	48 937	46 222	(NA)	2 715	2	2	(NA)	1
<b>Nonbuilding construction</b> .....	702 215	572 093	(NA)	130 121	1	1	(NA)	2
Highways, streets, and related facilities .....	259 423	227 950	(NA)	31 472	2	1	(NA)	10
Bridges, tunnels, and elevated highways .....	29 042	(D)	(NA)	(D)	(W)	(D)	(NA)	(D)
Dam and reservoir construction .....	19 345	19 345	(NA)	-	(W)	(W)	(NA)	-
Harbor and port facilities .....	34 069	31 947	(NA)	2 122	7	7	(NA)	37
Power and communication transmission lines, towers, and related facilities .....	77 541	65 153	(NA)	12 387	1	1	(NA)	(W)
Sewers, water mains, and related facilities .....	101 916	96 311	(NA)	5 605	2	1	(NA)	8
Sewers, sewer lines, and related facilities .....	50 307	46 604	(NA)	3 702	3	2	(NA)	9
Water mains and related facilities .....	51 608	49 706	(NA)	1 902	(W)	(W)	(NA)	(W)
Heavy industrial facilities .....	21 763	(D)	(NA)	(D)	3	(D)	(NA)	(D)
Sewage treatment and water treatment plants .....	6 891	6 891	(NA)	-	3	3	(NA)	-
Oilfields .....	99 427	51 473	(NA)	47 953	(W)	(W)	(NA)	(W)
Other nonbuilding construction .....	52 793	33 429	(NA)	19 362	5	5	(NA)	4
<b>Construction work, n.s.k.</b> .....	289 654	248 399	(NA)	41 254	3	3	(NA)	3

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction Industries and land subdividers and developers -----</b>	<b>1 507</b>	<b>10 091</b>	<b>17 677</b>	<b>8 400</b>	<b>3 449</b>	<b>10 565</b>	<b>4 649</b>
<b>15, 16, 17</b>	<b>Construction industries:</b>							
<b>15</b>	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	195	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings -----	12	154	225	153	51	188	73
1531	Operative builders -----	*22	(S)	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	43	246	406	65	30	176	61
1542	Nonresidential buildings, n.e.c. -----	136	2 074	3 791	1 971	878	2 160	945
<b>16</b>	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	84	1 529	3 253	1 185	531	1 620	928
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	2	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines -----	50	820	1 519	500	203	1 033	470
1629	Heavy construction, n.e.c. -----	86	934	1 432	899	337	997	381
<b>17</b>	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	173	632	1 199	505	254	593	276
1721	Painting and paper hanging -----	66	230	357	125	44	210	77
1731	Electrical work -----	147	680	1 184	644	268	737	320
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	6	(S)	(S)	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work --	49	257	406	204	70	302	113
1743	Terrazzo, tile, marble, and mosaic work --	*12	*31	*55	(D)	*17	*42	(S)
175	Carpentry and floor work:							
1751	Carpentry -----	49	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work -----	30	(S)	(S)	(S)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work -----	32	176	266	153	46	175	62
1771	Concrete work -----	53	216	268	102	29	218	71
1781	Water well drilling -----	6	38	58	34	13	39	15
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	24	160	254	194	73	145	59
1793	Glass and glazing work -----	10	50	82	47	17	47	22
1794	Excavation work -----	96	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work -----	2	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. -----	8	34	65	38	16	41	19
1799	Special trade contractors, n.e.c. -----	99	413	767	333	136	431	219
<b>6552</b>	<b>Land subdividers and developers, n.e.c. --</b>	<b>*7</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>	<b>(S)</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
12 124	5 428	9 276	4 150	3	3	3	3	3	3	3	3	3	3	15, 16, 17
														15
(S) 140	(S) 55	(S) 136	(S) 45	(S) 17	(S) 12	(S) 17	(S) 13	(S) 14	(S) 10	(S) 19	(S) 13	(S) 19	(S) 15	152 1521 1522
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	1531
														154
473 2 293	212 1 083	272 1 872	100 883	15 3	19 5	11 3	29 4	18 3	24 3	19 4	15 8	14 4	25 7	1541 1542
														16
1 924	1 078	1 387	715	3	3	1	2	3	5	5	4	6	2	1611
														162 1622
(D) 950 981	(D) 449 371	(D) 798 858	(D) 397 341	(D) 4 12	(D) 4 8	(D) 1 12	(D) 1 8	(D) 1 12	(D) 1 8	(D) 5 12	(D) 5 8	(D) 11 13	(D) 11 9	1623 1629
														17
801	363	628	305	8	10	9	11	9	11	8	9	10	10	1711
335	114	249	120	12	12	19	5	19	22	14	17	20	23	1721
757	327	580	268	5	6	7	8	6	7	7	7	4	7	1731
														174
														1741
(S) 355 44	(S) 154 (S)	(S) 167 (D)	(S) 67 *3	(S) 10 42	(S) 10 71	(S) 12 (D)	(S) 9 66	(S) 11 54	(S) 8 (S)	(S) 11 34	(S) 14 (S)	(S) 19 (D)	(S) 16 50	1742 1743
(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	(S) (S)	175 1751 1752
235	90	144	67	10	13	11	13	11	11	14	14	9	18	1761
360	103	186	63	19	16	27	26	21	17	19	17	26	23	1771
43	15	38	13	16	19	15	16	19	21	15	17	17	20	1781
184 61	77 25	120 43	43 17	6 2	6 1	5 1	5 10	4 1	3 5	12 10	10 10	8 5	6 8	179 1791 1793
(S) (D) 29	(S) (D) 14	(S) (D) 30	(S) (D) 13	(S) (D) (W)	(S) (D) 4	(S) (D) (W)	(S) (D) 6	(S) (D) (W)	(S) (D) 5	(S) (D) (W)	(S) (D) 1	(S) (D) (W)	(S) (D) 4	1794 1795 1796
483	225	406	186	16	21	19	24	16	22	17	22	17	23	1799
(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction industries and land subdividers and developers</b> .....	8.5	33.6	1 751.8	166.6	.255	.276	.196	.037
15, 16, 17	<b>Construction industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings .....	15.4	31.6	1 461.0	193.3	.196	.267	.458	.006
1531	Operative builders .....	*1.3	*24.6	(S)	*629.3	.095	(S)	*.253	(S)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses .....	8.4	34.3	1 650.4	227.5	.221	(D)	.298	.011
1542	Nonresidential buildings, n.e.c. ....	20.4	36.4	1 827.9	205.8	.236	.245	.287	.015
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction .....	21.5	48.4	2 127.5	228.3	.250	.237	.173	.098
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines .....	19.4	30.6	1 852.4	169.0	.214	.293	.111	.027
1629	Heavy construction, n.e.c. ....	13.3	37.4	1 533.2	117.2	.391	.322	.116	.036
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning .....	5.0	30.6	1 897.2	166.1	.254	.332	.173	.020
1721	Painting and paper hanging .....	4.0	25.3	1 552.2	90.5	.320	.203	.082	.013
1731	Electrical work .....	6.2	37.5	1 741.2	149.5	.338	.345	*.029	.025
174	Masonry, stoneowrk, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)
1742	Plastering, drywall, and insulation work .....	6.4	35.0	1 579.8	105.9	.405	.219	.037	.029
1743	Terrazzo, tile, marble, and mosaic work .....	(D)	(D)	*1 774.2	(D)	(D)	(D)	.023	(S)
175	Carpentry and floor work:								
1751	Carpentry .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floor work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(D)
1761	Roofing, siding, and sheet metal work .....	6.7	31.6	1 511.4	153.8	.251	(D)	.039	.009
1771	Concrete work .....	5.0	20.6	1 240.7	98.3	.256	.351	.077	.034
1781	Water well drilling .....	7.7	23.9	1 526.3	115.1	.252	.294	(D)	.016
179	Miscellaneous special trade contractors:								
1791	Structural steel erection .....	7.7	25.5	1 587.5	94.6	.311	(D)	.064	.049
1793	Glass and glazing work .....	7.6	26.3	1 640.0	107.5	.371	.652	(D)	.032
1794	Excavation work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ....	5.9	46.5	1 911.8	212.4	.302	.290	(D)	.011
1799	Special trade contractors, n.e.c. ....	5.5	26.7	1 857.1	95.0	.371	.203	.051	.023
6552	<b>Land subdividers and developers, n.e.c.</b> .....	(S)	(S)	(S)	(S)	(S)	(D)	(D)	(S)

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Not applicable]

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## California

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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for California. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 204,342 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$88.0 billion in total value of business done.

Most of the 204,342 construction establishments were small. Of the total, 145,292 were nonemployers, and over half of the employer establishments had less than 5 employees. The 26,274 construction establishments with 5 employees or more, while representing only 13 percent of all establishments, accounted for more than 76 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$74.2 billion on total dollar value of business done. Of this amount, \$71.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$21.1 billion, leaving net value of construction work of \$50.1 billion. In addition, these establishments paid out \$21.2 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$32.9 billion. (See Introduction and appendixes for explanation of terms.)

There were 59,050 establishments with total employment averaging 598,320 during the year. Total payroll for 1987 was \$14.9 billion. Total hours worked by construction workers during the year were 739 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.


Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 145,292 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$13.3 billion. Most of these establishments, about 72 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987   
1982 

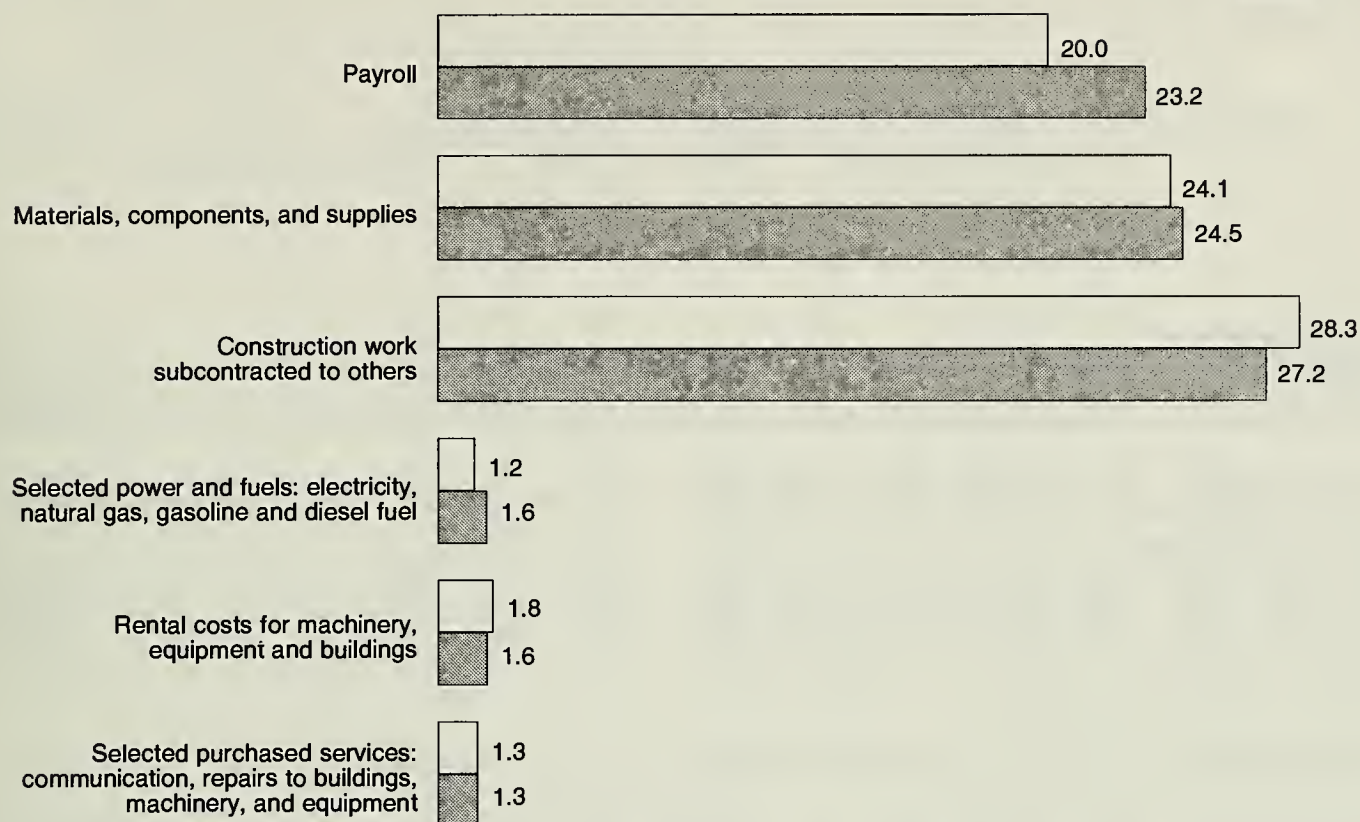


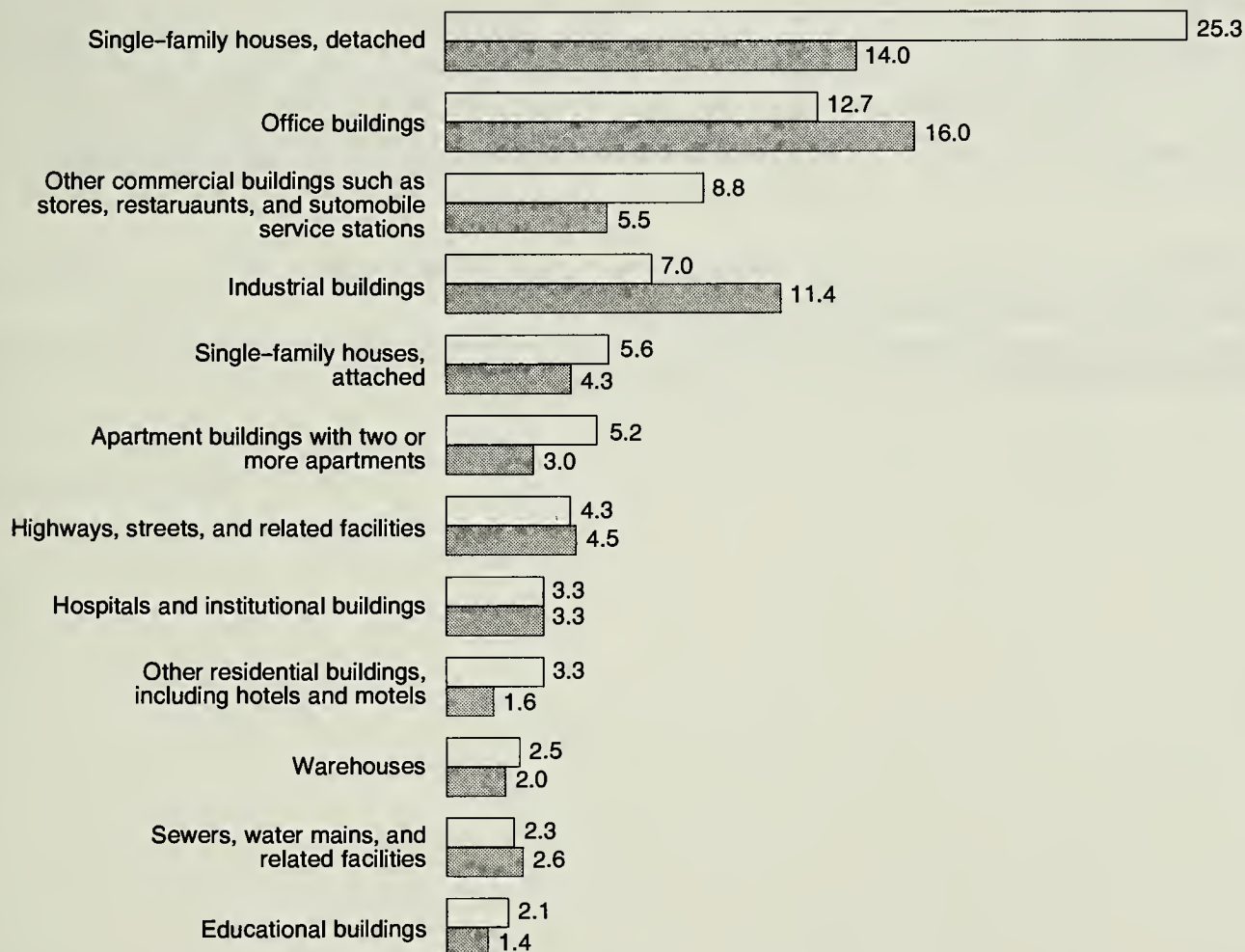


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987   
1982 





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
		Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done	Number	Proprie- tors and working partners	Dollar value of business done	Number	Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction industries and land subdividers and developers .....	204 342	163 099	598 320	87 984 753	145 292	145 359	13 286 669	59 050	17 740	598 320	74 698 084	(W)	(W)
15, 16, 17	Construction industries .....	198 937	157 759	591 609	81 597 547	141 130	140 266	8 550 461	57 807	17 493	591 609	73 047 086	(W)	(W)
15	Building construction—General contractors and operative builders .....	52 640	37 960	145 185	37 689 004	34 380	33 076	3 700 257	18 260	4 884	145 185	33 988 747	1	1
16	Heavy construction other than building construction— contractors .....	4 921	2 480	74 083	9 609 148	1 820	1 820	261 310	3 101	660	74 083	9 347 838	1	1
17	Special trade contractors .....	141 376	117 319	372 341	34 299 396	104 930	105 370	4 588 895	36 446	11 949	372 341	29 710 501	(W)	(W)
1711	Plumbing, heating, and air-conditioning ..	15 263	11 012	64 720	6 571 059	8 931	8 961	512 219	6 332	2 051	64 720	6 058 840	1	1
1731	Electrical work .....	14 903	10 961	57 797	5 362 612	9 150	9 139	426 537	5 753	1 822	57 797	4 936 075	1	1
6552	Land subdividers and developers, n.e.c.² .....	5 394	5 332	6 697	6 387 193	4 162	5 093	4 736 207	1 232	239	6 697	1 650 986	6	4
	1982													
	Construction industries and land subdividers and developers .....	136 972	111 379	443 349	48 739 078	90 279	92 145	5 462 742	46 693	19 234	443 349	43 276 336	(W)	(W)
15, 16, 17	Construction industries .....	133 527	108 010	434 817	46 771 502	87 966	88 958	4 117 722	45 561	19 052	434 817	42 653 780	(W)	(W)
15	Building construction—General contractors and operative builders .....	35 609	26 998	97 950	17 070 431	21 680	21 708	1 784 029	13 929	5 290	97 950	15 286 402	1	(W)
16	Heavy construction other than building construction— contractors .....	5 507	3 768	90 037	11 419 453	3 008	3 060	243 046	2 499	708	90 037	11 176 407	(W)	(W)
17	Special trade contractors .....	92 411	77 244	246 830	18 281 618	63 278	64 190	2 090 647	29 133	13 054	246 830	16 190 971	1	(W)
1711	Plumbing, heating, and air-conditioning ..	10 888	7 705	50 766	3 940 871	5 615	5 669	252 516	5 273	2 036	50 766	3 688 355	1	(W)
1731	Electrical work .....	9 856	7 214	45 261	3 617 743	5 495	5 576	202 791	4 361	1 638	45 261	3 414 952	1	(W)
6552	Land subdividers and developers, n.e.c.² .....	3 442	3 360	8 533	1 968 370	2 313	3 187	1 345 020	1 129	173	8 533	623 350	3	3

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

<sup>1</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

<sup>2</sup>For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
<b>The State</b> .....	<b>204 342</b>	<b>163 099</b>	<b>598 320</b>	<b>87 984 753</b>	<b>145 292</b>	<b>145 359</b>	<b>13 286 669</b>	<b>59 050</b>	<b>17 740</b>	<b>598 320</b>	<b>74 698 084</b>	<b>(W)</b>	<b>(W)</b>
\$10,000,000 or more .....	1 169	251	146 495	36 048 915	106	162	2 216 484	1 063	89	146 495	33 832 431	(W)	(W)
\$5,000,000 to \$9,999,999 .....	1 498	375	67 620	10 219 530	169	268	1 192 328	1 329	107	67 620	9 027 202	(W)	2
\$2,500,000 to \$4,999,999 .....	2 820	676	74 328	9 789 766	304	453	1 033 017	2 516	223	74 328	8 756 749	1	2
\$1,000,000 to \$2,499,999 .....	7 392	2 000	109 208	11 467 415	856	1 012	1 303 487	6 536	988	109 208	10 163 928	1	1
\$500,000 to \$999,999 .....	10 021	4 250	73 791	7 047 648	1 909	1 975	1 322 584	8 112	2 275	73 791	5 725 064	2	2
\$250,000 to \$499,999 .....	(S)	(S)	(S)	(S)	4 208	4 156	1 458 731	(S)	(S)	(S)	(S)	(S)	(S)
\$100,000 to \$249,999 .....	(S)	(S)	(S)	(S)	12 607	12 627	1 937 925	(S)	(S)	(S)	(S)	(S)	(S)
\$50,000 to \$99,999 .....	(S)	(S)	(S)	(S)	17 438	17 456	1 228 071	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 .....	(S)	(S)	(S)	(S)	23 834	23 766	851 513	(S)	(S)	(S)	(S)	(S)	(S)
Less than \$25,000 .....	(S)	(S)	(S)	(S)	83 861	83 484	742 530	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	31 881	31 776	528 744	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	18 944	18 825	138 339	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	13 785	13 727	50 466	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 .....	(NA)	(NA)	(NA)	(NA)	19 251	19 156	24 981	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
<b>The State</b> .....	<b>136 972</b>	<b>111 379</b>	<b>443 349</b>	<b>48 739 078</b>	<b>90 279</b>	<b>92 145</b>	<b>5 462 742</b>	<b>46 693</b>	<b>19 234</b>	<b>443 349</b>	<b>43 276 336</b>	<b>(W)</b>	<b>(W)</b>
\$10,000,000 or more .....	553	88	133 996	21 564 832	20	30	394 105	533	58	133 996	21 170 727	(W)	(W)
\$5,000,000 to \$9,999,999 .....	657	112	37 386	4 550 537	49	77	338 686	608	35	37 386	4 211 851	(W)	(W)
\$2,500,000 to \$4,999,999 .....	1 405	278	44 672	4 914 166	132	214	446 333	1 273	64	44 672	4 467 833	(W)	(W)
\$1,000,000 to \$2,499,999 .....	3 705	1 053	62 447	5 748 197	437	663	677 410	3 268	390	62 447	5 070 787	1	1
\$500,000 to \$999,999 .....	5 480	1 867	51 091	3 823 877	732	904	506 034	4 748	963	51 091	3 317 843	2	2
\$250,000 to \$499,999 .....	8 564	4 358	43 450	2 999 302	1 654	1 802	565 265	6 910	2 556	43 450	2 434 037	2	2
\$100,000 to \$249,999 .....	17 314	12 228	40 635	2 741 497	5 855	6 232	882 626	11 459	5 996	40 635	1 858 871	2	2
\$50,000 to \$99,999 .....	16 572	13 797	15 098	1 176 050	9 558	10 025	661 727	7 014	3 772	15 098	514 323	3	2
\$25,000 to \$49,999 .....	18 577	16 576	6 821	658 122	14 438	14 700	504 609	4 139	1 876	6 821	153 513	4	3
Less than \$25,000 .....	64 142	61 020	7 750	562 497	57 404	57 498	485 947	6 738	3 522	7 750	76 550	2	3
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	21 834	21 939	346 567	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	13 684	13 693	93 407	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	12 676	12 716	36 763	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 .....	(NA)	(NA)	(NA)	(NA)	9 210	9 150	9 210	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.



**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
		A	B	C	D	E	F	G	H
	Construction industries and land subdividers and developers -----	59 050	598 320	466 975	14 905 469	10 567 484	738 871	71 177 525	50 071 124
15, 16, 17	Construction Industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	10 627	50 427	39 562	886 556	620 708	53 876	5 467 742	3 539 248
1522	Other residential buildings -----	1 134	10 971	8 515	251 762	167 398	12 436	2 011 150	869 308
1531	Operative builders -----	2 051	23 367	10 499	715 115	225 458	17 066	9 709 500	4 642 187
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	797	11 169	8 013	343 702	218 446	13 263	2 643 336	1 236 091
1542	Nonresidential buildings, n.e.c. -----	3 651	49 251	36 212	1 450 497	916 551	60 163	11 875 924	4 324 116
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	839	18 748	15 237	623 555	471 556	25 420	2 975 885	2 418 325
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	53	1 940	1 642	55 819	44 880	2 930	301 677	213 007
1623	Water, sewer, and utility lines -----	1 063	19 119	16 023	519 083	397 383	27 199	2 101 952	1 877 640
1629	Heavy construction, n.e.c. -----	1 146	34 276	24 604	1 043 796	718 349	42 878	3 727 902	3 222 676
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	6 332	64 720	49 300	1 777 997	1 291 980	84 616	5 975 639	5 482 215
1721	Painting and paper hanging -----	3 660	21 370	18 422	417 008	339 754	27 079	1 144 368	1 086 309
1731	Electrical work -----	5 753	57 797	44 987	1 597 436	1 186 941	76 374	4 866 723	4 596 165
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	1 536	12 609	11 035	265 220	220 311	16 232	870 706	813 113
1742	Plastering, drywall, and insulation work -----	2 991	48 672	42 757	1 072 403	883 136	62 739	3 127 372	2 949 394
1743	Terrazzo, tile, marble, and mosaic work -----	979	7 465	6 124	179 077	138 204	9 339	529 857	509 884
175	Carpentry and floor work:								
1751	Carpentry -----	2 836	33 297	29 230	661 061	532 242	42 181	2 282 195	2 109 600
1752	Floor laying and other floor work -----	1 066	6 615	5 096	157 708	110 432	8 043	623 028	576 974
1761	Roofing, siding, and sheet metal work -----	2 625	27 289	22 173	524 590	376 902	33 192	1 907 960	1 850 404
1771	Concrete work -----	2 846	33 363	28 823	763 780	608 205	44 275	2 781 887	2 503 883
1781	Water well drilling -----	206	1 598	1 242	39 168	27 485	2 284	147 661	144 607
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	422	8 769	7 163	259 225	193 128	11 377	833 529	766 018
1793	Glass and glazing work -----	799	6 474	4 568	154 831	105 447	7 401	572 626	562 199
1794	Excavation work -----	890	9 607	8 137	264 343	201 766	14 147	1 204 038	1 074 612
1795	Wrecking and demolition work -----	135	2 572	2 139	37 701	29 516	2 306	132 149	123 698
1796	Installing building equipment, n.e.c. -----	349	5 441	4 366	189 827	153 655	7 955	523 790	499 863
1799	Special trade contractors, n.e.c. -----	3 021	24 683	19 694	492 221	363 363	32 135	1 733 578	1 558 899
6552	Land subdividers and developers, n.e.c. -----	1 232	6 697	1 383	161 978	24 277	1 950	1 105 341	520 680

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
32 876 569	18 895 502	21 106 400	1 327 711	898 871	6 367 653	443 349	40 579 275	19 628 452	(W)	(W)	1	15, 16, 17
												15
2 241 792	1 450 821	1 928 494	53 522	57 989	424 633	34 439	2 389 711	997 916	2	3	5	152
560 032	336 924	1 141 841	14 495	7 270	69 525	4 233	507 644	131 883	4	4	10	1521
												1522
3 345 739	1 729 872	5 067 312	42 495	89 063	734 898	14 504	2 586 798	1 077 662	2	2	9	1531
761 244	534 146	1 407 245	31 283	19 404	120 917	11 234	2 304 475	863 859	3	2	4	154
2 983 346	1 571 067	7 551 808	117 707	57 574	420 763	33 540	6 760 452	1 324 401	2	1	3	1541
												1542
												16
1 591 856	954 841	557 559	194 553	107 835	751 026	12 958	1 566 812	780 500	1	1	5	1611
153 566	62 691	88 670	6 563	3 833	28 698	1 021	119 554	39 126	2	3	14	162
1 238 137	672 444	224 312	100 414	54 754	371 977	15 421	1 332 858	791 178	2	1	5	1622
2 142 609	1 155 923	505 226	148 391	98 293	591 395	60 637	6 847 226	3 999 987	1	1	3	1623
												1629
												17
3 365 458	2 199 958	493 424	97 903	71 600	514 792	50 766	3 591 253	2 057 293	1	1	4	1711
836 719	255 398	58 059	20 384	20 849	118 117	12 771	564 638	414 296	2	2	7	1721
2 864 117	1 801 400	270 557	69 608	56 388	373 395	45 261	3 347 408	1 985 527	1	1	4	1731
501 296	315 550	57 592	10 586	9 182	71 818	7 360	332 914	196 273	3	2	9	174
1 969 177	1 015 803	177 978	43 377	38 558	192 958	25 112	1 397 629	859 077	1	1	6	1741
319 898	198 253	19 973	6 346	8 977	47 540	3 601	192 111	112 713	3	3	12	1742
												1743
1 236 429	901 964	172 594	31 753	20 523	103 905	13 608	687 034	372 182	2	2	6	175
314 083	273 927	46 053	9 386	4 943	28 713	5 044	334 512	167 068	3	4	11	1751
												1752
1 109 870	767 118	57 555	32 437	30 244	187 110	18 461	1 031 856	580 943	2	1	6	1761
1 518 217	1 003 015	278 004	78 963	38 652	305 764	19 144	1 313 708	738 846	2	1	4	1771
90 038	60 141	3 054	2 514	3 437	43 697	1 596	97 149	54 869	4	4	9	1781
508 363	280 097	67 511	17 966	7 774	72 817	6 960	522 585	323 143	2	1	5	179
307 226	289 451	10 426	12 737	4 149	34 443	4 407	373 732	202 025	6	6	10	1791
852 454	256 657	129 425	125 467	36 612	229 859	9 121	746 039	498 603	3	2	10	1793
113 285	15 232	8 450	7 632	4 259	29 627	976	52 295	43 831	2	3	8	1794
376 610	135 847	23 927	7 973	5 586	43 854	5 141	367 644	268 450	2	2	10	1795
1 068 146	540 026	174 679	34 617	31 618	214 445	17 501	847 968	528 785	2	2	7	1796
												1797
506 841	116 922	584 660	8 628	9 492	240 951	8 533	364 053	218 462	6	7	11	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	59 050	46 693	44 691	35 052	(W)	1	1	2
Proprietors and working partners .....	17 740	19 234	29 075	22 944	2	2	2	2
All employees** .....	598 320	443 349	424 397	361 710	(W)	(W)	(W)	1
Construction workers:								
March .....	441 938	328 571	307 154	272 863	(W)	(W)	(W)	1
May .....	465 210	333 996	332 671	283 164	(W)	1	1	1
August .....	491 068	336 704	348 708	304 896	(W)	1	1	1
November .....	469 683	328 727	341 022	283 631	(W)	1	1	1
Average .....	466 975	336 885	332 667	289 769	(W)	(W)	(W)	1
Other employees:								
March .....	129 435	105 325	88 635	70 289	1	(W)	1	1
May .....	130 850	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August .....	132 931	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November .....	132 189	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Average .....	131 351	(NA)	(NA)	(NA)	(W)	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	169 096	119 274	(NA)	(NA)	(W)	(W)	(NA)	(NA)
April to June .....	185 610	122 174	(NA)	(NA)	(W)	(W)	(NA)	(NA)
July to September .....	197 326	130 607	(NA)	(NA)	(W)	(W)	(NA)	(NA)
October to December .....	186 838	119 578	(NA)	(NA)	1	1	(NA)	(NA)
Total hours worked .....	738 871	491 634	(NA)	(NA)	(W)	(W)	(NA)	(NA)
Payroll, all employees .....	14 905 469	10 038 911	6 674 014	4 147 447	(W)	(W)	(W)	1
Payroll, construction workers .....	10 567 484	7 237 465	4 878 204	3 218 491	(W)	(W)	(W)	1
Payroll, other employees .....	4 337 985	2 801 446	1 795 810	928 956	(W)	(W)	1	1
First quarter payroll, all employees .....	3 361 379	2 336 909	1 473 035	(NA)	(W)	(W)	(W)	(NA)
Employer costs for fringe benefits, all employees .....	3 742 380	1 928 342	1 691 635	(NA)	(W)	(W)	(W)	(NA)
Legally required expenditures .....	2 505 330	1 364 446	775 637	(NA)	(W)	(W)	(W)	(NA)
Voluntary expenditures .....	1 237 049	563 895	915 998	(NA)	(W)	(W)	(W)	(NA)
Dollar value of business done .....	74 698 084	43 276 336	30 514 878	17 716 835	(W)	(W)	(W)	1
Value of construction work <sup>1</sup> .....	71 177 525	40 579 275	28 640 520	16 773 736	(W)	(W)	(W)	1
Value of construction work subcontracted in from others .....	19 718 875	9 656 495	7 878 163	3 890 134	1	1	(W)	(W)
Land receipts <sup>2</sup> .....	1 819 611	618 562	(NA)	(NA)	2	1	(NA)	(NA)
Other business receipts .....	1 700 952	2 078 498	1 874 359	943 099	1	(W)	1	2
Net value of construction† .....	50 071 124	28 828 153	20 372 929	11 472 227	(W)	(W)	(W)	1
Value added†† .....	32 876 569	19 628 452	12 825 518	7 247 500	(W)	(W)	(W)	1
Selected costs .....	40 001 903	23 029 322	16 894 229	10 036 228	1	(W)	(W)	1
Materials, components, and supplies <sup>3</sup> .....	17 979 694	10 603 707	8 168 104	4 734 719	(W)	(W)	(W)	1
Construction work subcontracted to others .....	21 106 400	11 751 122	8 267 591	5 301 509	1	(W)	1	1
Selected power, fuels, and lubricants .....	915 807	674 492	458 535	(NA)	1	(W)	1	(NA)
Electricity .....	134 202	92 721	55 969	(NA)	1	1	1	(NA)
Natural gas .....	29 090	26 171	30 697	(NA)	2	1	2	(NA)
Gasoline and diesel fuel .....	692 365	507 100	307 260	(NA)	1	1	1	(NA)
On highway use .....	523 564	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use .....	168 800	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	60 149	48 500	64 636	(NA)	1	1	1	(NA)
Rental cost for machinery, equipment, and buildings .....	1 327 711	684 686	443 823	(NA)	1	1	1	(NA)
For machinery and equipment .....	953 194	483 490	359 914	269 678	1	1	1	2
For buildings .....	374 516	201 196	83 909	(NA)	1	1	1	(NA)
Selected purchased services .....	945 870	558 197	417 366	(NA)	1	1	2	(NA)
Communication services .....	308 243	190 204	135 701	(NA)	1	1	6	(NA)
Repairs to buildings and other structures .....	56 811	33 191	26 350	(NA)	3	2	3	(NA)
Repairs to machinery and equipment .....	580 815	334 801	255 315	(NA)	1	1	1	(NA)
Ownership of construction projects:								
Value of construction work .....	71 177 525	40 579 275	28 640 520	16 773 736	(W)	(W)	(W)	1
Government owned .....	10 451 942	7 095 289	4 530 809	3 756 469	1	1	(W)	1
Federal .....	2 950 407	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
State and local .....	7 501 534	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Privately owned .....	60 725 583	33 483 986	24 109 710	13 017 267	1	(W)	(W)	1

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	5 857 281	5 648 558	1	1
Capital expenditures, other than land -----	898 871	527 829	1	1
New -----	713 766	399 559	2	1
Used -----	185 104	128 270	3	2
Retirements and disposition of depreciable assets -----	388 499	330 188	3	2
End-of-year gross book value of depreciable assets -----	6 367 653	5 846 199	1	1
Depreciation charges during year -----	765 057	690 898	1	1
<b>Buldngs and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	1 597 044	1 332 074	3	1
Capital expenditures, other than land -----	173 043	141 573	5	1
New buildings and other structures -----	131 388	120 744	6	1
Used buildings and other structures -----	41 655	20 828	9	3
Retirements and disposition of depreciable assets -----	106 408	88 179	8	5
End-of-year gross book value of depreciable assets -----	1 663 680	1 385 468	3	1
Depreciation charges during year -----	132 242	120 464	3	1
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	4 260 236	4 316 483	1	1
Capital expenditures, other than land -----	725 827	386 255	1	1
New machinery and equipment, including automobiles and trucks -----	582 378	278 814	1	1
New automobiles and trucks, intended primarily for highway use -----	274 150	124 737	2	1
Used machinery and equipment, including automobiles and trucks -----	143 449	107 441	2	2
Retirements and disposition of depreciable assets -----	282 091	242 008	3	1
End-of-year gross book value of depreciable assets -----	4 703 972	4 460 730	1	1
Depreciation charges during year -----	632 815	570 434	1	1

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
<b>All establishments:</b>		
Number .....	59 050	(W)
Value of construction work .....	71 177 525	(W)
<b>Establishments with inventories:</b>		
Number .....	21 583	1
Value of construction work .....	35 141 192	1
<b>Inventories<sup>1</sup>:</b>		
End of 1987, materials and supplies .....	768 092	2
End of 1986, materials and supplies .....	714 014	2
<b>Establishments with no inventories:</b>		
Number .....	27 351	1
Value of construction work .....	23 843 952	1
<b>Establishments not reporting:</b>		
Number .....	10 116	2
Value of construction work .....	12 192 381	1

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments -----	59 050	(S)	12 493	7 595	4 375	1 177	504	99	26	5
All employees** -----	598 320	(S)	80 525	100 779	130 026	79 704	74 882	33 458	16 260	16 706
Payroll, all employees -----	14 905 469	(S)	1 568 802	2 269 487	3 439 775	2 356 092	2 285 572	944 026	484 847	512 093
Construction worker hours (thousands) -----	738 871	(S)	88 482	121 200	164 175	106 788	101 624	44 896	20 318	18 224
Dollar value business done -----	74 698 084	(S)	7 494 174	10 602 994	15 312 600	11 762 961	13 020 813	4 920 587	2 498 802	1 525 166
Value of construction work <sup>1</sup> -----	71 177 525	(S)	7 169 023	10 149 370	14 666 745	11 100 443	12 249 285	4 662 800	3 978 589	(D)
Net value of construction work† -----	50 071 124	(S)	5 595 771	7 448 815	10 914 878	7 687 015	7 537 200	2 919 359	1 484 296	1 275 959
Value added†† -----	32 876 569	(S)	3 626 878	4 932 572	7 220 470	5 089 728	5 140 907	2 949 675	(D)	679 979
Cost of materials, components, supplies, and fuels -----	18 895 502	(S)	2 110 989	2 715 753	4 032 147	2 844 173	2 865 213	1 047 016	1 195 355	(D)
Cost of construction work subcontracted to others -----	21 106 400	(S)	1 573 252	2 700 555	3 751 867	3 413 427	4 712 085	1 743 441	1 218 334	(D)
Rental cost for machinery, equipment, and buildings -----	1 327 711	(S)	132 686	177 850	318 286	217 756	251 996	86 977	27 635	15 394
Capital expenditures, other than land -----	898 871	(S)	118 178	117 231	190 105	124 685	130 939	83 783	23 765	(D)
End-of-year gross book value of depreciable assets -----	6 367 653	(S)	870 268	958 739	1 318 455	888 196	880 293	430 451	206 755	(D)
<b>1982</b>										
All employees** -----	443 349	57 394	54 797	67 918	81 738	46 350	40 490	20 722	15 924	58 015
Value of construction work <sup>1</sup> -----	40 579 275	3 493 804	3 557 740	5 201 916	7 695 809	5 254 242	4 656 914	2 857 173	1 790 679	6 070 998
Value added†† -----	19 628 452	1 628 868	1 767 136	2 559 217	3 462 776	2 538 710	1 905 878	1 357 466	834 359	3 574 040
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** -----	(W)	(S)	2	1	1	1	(W)	(W)	(W)	(W)
Net value of construction work† -----	(W)	(S)	2	1	1	(W)	(W)	(W)	(W)	(W)
Capital expenditures, other than land -----	1	(S)	9	4	2	1	1	(W)	(W)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments .....	59 050	(S)	(S)	(S)	(S)	(S)	8 112	6 536	2 516	1 329	1 063
All employees** .....	598 320	(S)	(S)	(S)	(S)	(S)	73 791	109 208	74 328	67 620	146 495
Payroll, all employees .....	14 905 469	(S)	(S)	(S)	(S)	(S)	1 479 673	2 544 481	2 030 403	2 035 731	4 998 114
Construction worker hours (thousands) .....	738 871	(S)	(S)	(S)	(S)	(S)	88 189	133 584	94 169	91 277	191 114
Dollar value of business done .....	74 698 084	(S)	(S)	(S)	(S)	(S)	5 725 064	10 163 928	8 756 749	9 027 202	33 832 431
Value of construction work <sup>1</sup> .....	71 177 525	(S)	(S)	(S)	(S)	(S)	5 561 513	9 760 647	8 417 590	8 710 312	31 712 931
Net value of construction work† .....	50 071 124	(S)	(S)	(S)	(S)	(S)	4 697 701	7 941 815	6 479 618	6 482 630	18 255 152
Value added†† .....	32 876 569	(S)	(S)	(S)	(S)	(S)	3 012 814	5 189 382	4 247 382	4 187 224	12 302 638
Cost of materials, components, supplies, and fuels .....	18 895 502	(S)	(S)	(S)	(S)	(S)	1 778 658	2 984 374	2 393 893	2 459 350	6 883 438
Cost of construction work subcontracted to others .....	21 106 400	(S)	(S)	(S)	(S)	(S)	863 811	1 818 831	1 937 972	2 227 681	13 457 779
Rental cost for machinery, equipment, and buildings .....	1 327 711	(S)	(S)	(S)	(S)	(S)	115 918	194 519	173 202	175 426	536 532
Capital expenditures, other than land .....	898 871	(S)	(S)	(S)	(S)	(S)	93 898	128 992	121 345	101 061	311 698
End-of-year gross book value of depreciable assets .....	6 367 653	(S)	(S)	(S)	(S)	(S)	622 154	956 737	911 988	718 001	2 154 485
<b>1982</b>											
All employees** .....	443 349	7 750	6 821	15 098	40 635	43 450	51 091	62 447	44 672	37 386	133 996
Value of construction work <sup>1</sup> .....	40 579 275	74 225	148 562	501 458	1 808 733	2 372 616	3 197 857	4 869 776	4 295 909	4 054 714	19 255 422
Value added†† .....	19 628 452	37 594	77 272	262 253	952 982	1 239 311	1 671 729	2 534 547	2 210 351	1 929 012	8 713 398
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** .....	(W)	(S)	(S)	(S)	(S)	(S)	2	1	1	(W)	(W)
Net value of construction work† .....	(W)	(S)	(S)	(S)	(S)	(S)	2	1	1	1	(W)
Capital expenditures, other than land .....	1	(S)	(S)	(S)	(S)	(S)	5	4	8	2	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	71 177 525	51 137 633	11 092 409	5 655 858	(W)	(W)	1	1
<b>Building construction</b> .....	55 863 172	42 329 977	9 267 805	3 750 995	(W)	1	1	2
Single-family houses .....	21 948 802	18 302 997	2 434 656	1 211 149	1	1	2	2
Single-family houses, detached .....	17 964 300	14 817 545	2 131 142	1 015 613	1	1	2	2
Single-family houses, attached .....	3 984 502	3 485 452	303 514	195 536	2	2	5	4
Apartment buildings with two or more apartments .....	3 677 873	3 111 382	232 376	334 114	3	2	4	15
Other residential buildings, including hotels and motels .....	2 376 982	1 904 744	329 113	143 124	2	3	3	3
Hotels and motels .....	1 521 705	1 253 911	185 891	81 902	3	4	3	3
Other residential buildings, excluding hotels and motels .....	855 277	650 833	143 222	61 222	4	4	6	6
Office buildings .....	9 010 112	6 365 558	2 108 198	536 355	1	1	2	2
Other commercial buildings such as stores, restaurants, and automobile service stations .....	6 288 167	4 295 722	1 402 322	590 123	1	1	2	4
Industrial buildings and warehouses .....	6 768 175	4 874 848	1 336 618	556 708	1	1	2	2
Industrial buildings .....	4 979 766	3 413 344	1 102 220	464 202	1	1	2	2
Warehouses .....	1 788 409	1 461 504	234 398	92 506	2	2	3	4
Religious buildings .....	303 751	187 714	77 314	38 723	6	10	6	5
Educational buildings .....	1 435 037	876 430	440 440	118 166	2	1	3	5
Hospitals and institutional buildings .....	2 359 907	1 581 406	658 611	119 889	1	1	2	5
Farm buildings .....	106 815	77 934	16 192	12 687	11	14	17	9
Amusement, social, and recreational buildings .....	228 875	149 398	53 712	25 765	4	6	7	5
Other nonresidential buildings .....	844 277	601 844	178 253	64 192	2	2	5	5
Land development for buildings .....	514 399	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	12 537 124	8 807 656	1 824 605	1 904 863	1	1	2	1
Highways, streets, and related facilities .....	3 082 650	1 760 850	776 394	545 405	1	1	4	2
Outdoor swimming pools .....	441 078	343 030	65 045	33 003	7	6	14	19
Parking areas including private driveways .....	601 409	403 509	76 095	121 804	3	3	7	6
Fencing .....	230 853	179 201	22 141	29 511	7	7	10	11
Recreational facilities such as athletic fields, golf courses, and outdoor tennis courts .....	106 945	83 203	13 634	10 107	10	11	12	16
Bridges, tunnels, and elevated highways .....	503 681	411 172	68 681	23 827	1	1	3	5
Dam and reservoir construction .....	281 890	260 603	8 680	12 606	1	(W)	3	25
Marine construction .....	202 960	150 882	16 592	35 485	2	1	4	6
Conservation and development construction .....	333 294	263 989	46 538	22 766	6	7	7	10
Power and communication transmission lines, towers, and related facilities .....	715 922	506 024	69 679	140 219	8	8	3	10
Sewers, water mains, and related facilities .....	1 667 891	1 371 555	176 900	119 436	2	2	5	4
Sewers, sewer lines, and related facilities .....	869 639	718 790	89 853	60 995	2	2	8	6
Water mains and related facilities .....	798 252	652 765	87 047	58 441	2	2	3	4
Pipeline, other than sewer or water lines .....	542 360	421 642	75 446	45 271	2	3	2	3
Mass transit construction .....	90 830	75 560	7 245	8 024	3	1	8	34
Blast furnaces, petroleum refineries, and chemical complexes .....	774 265	501 417	116 824	156 022	1	(W)	2	4
Power plants, except nuclear .....	629 042	533 348	25 865	69 828	1	1	4	1
Sewage treatment and water treatment plants .....	650 395	498 773	117 182	34 439	2	2	6	13
Sewage treatment plants .....	345 020	265 361	64 935	14 723	3	3	3	8
Water treatment plants .....	305 375	233 412	52 247	19 716	3	1	13	17
Earthmoving, nonbuilding .....	365 779	311 727	27 624	26 428	3	3	6	4
Other nonbuilding construction .....	1 315 880	731 171	114 040	470 682	3	3	8	8
<b>Construction work, n.s.k.</b> .....	2 777 229	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	40 579 275	34 939 155	(NA)	5 640 120	(W)	(W)	(NA)	1
<b>Building construction</b> .....	26 212 062	22 353 169	(NA)	3 858 893	(W)	(W)	(NA)	1
Single-family houses .....	7 444 788	6 255 720	(NA)	1 189 068	1	1	(NA)	1
Single-family houses, detached .....	5 681 326	4 670 804	(NA)	1 010 522	1	1	(NA)	2
Single-family houses, attached .....	1 763 462	1 584 916	(NA)	178 546	1	1	(NA)	3
Apartment buildings with two or more apartments .....	1 218 502	982 402	(NA)	236 100	1	1	(NA)	2
Other residential buildings, including hotels and motels .....	665 459	565 384	(NA)	100 074	1	1	(NA)	2
Office buildings .....	6 489 419	5 794 079	(NA)	695 340	(W)	(W)	(NA)	1
Other commercial buildings such as stores, restaurants, and automobile service stations .....	2 247 615	1 848 243	(NA)	399 372	1	1	(NA)	2
Industrial buildings and warehouses .....	5 452 436	4 631 099	(NA)	821 337	(W)	(W)	(NA)	1
Industrial buildings .....	4 642 155	3 943 846	(NA)	698 308	1	1	(NA)	1
Warehouses .....	810 280	687 252	(NA)	123 028	1	1	(NA)	2
Religious buildings .....	177 780	136 443	(NA)	41 336	3	3	(NA)	4
Educational buildings .....	585 768	476 346	(NA)	109 422	2	2	(NA)	2
Hospitals and institutional buildings .....	1 339 389	1 172 508	(NA)	166 881	1	1	(NA)	2
Farm buildings .....	83 389	71 286	(NA)	12 103	7	6	(NA)	12
Amusement, social, and recreational buildings .....	229 298	203 328	(NA)	25 970	2	3	(NA)	5
Other nonresidential buildings .....	278 212	216 327	(NA)	61 885	3	3	(NA)	5
<b>Nonbuilding construction</b> .....	11 971 562	10 639 832	(NA)	1 331 729	(W)	(W)	(NA)	1
Highways, streets, and related facilities .....	1 825 916	1 349 833	(NA)	476 082	1	1	(NA)	2
Bridges, tunnels, and elevated highways .....	262 875	216 547	(NA)	46 327	1	1	(NA)	2
Dam and reservoir construction .....	137 639	121 111	(NA)	16 528	2	2	(NA)	3
Marine construction .....	134 505	107 299	(NA)	27 206	2	2	(NA)	7
Harbor and port facilities .....	100 199	61 207	(NA)	38 992	2	2	(NA)	4
Conservation and development construction .....	218 693	192 361	(NA)	26 332	4	3	(NA)	12
Power and communication transmission lines, towers, and related facilities .....	711 373	632 830	(NA)	78 542	1	1	(NA)	2
Sewers, water mains, and related facilities .....	1 037 864	874 297	(NA)	163 566	1	2	(NA)	2
Pipeline, other than sewer or water lines .....	338 630	265 995	(NA)	72 635	1	2	(NA)	1
Mass transit construction .....	611 594	583 017	(NA)	28 577	(W)	(W)	(NA)	3
Blast furnaces, petroleum refineries, and chemical complexes .....	1 972 518	1 858 665	(NA)	113 853	(W)	(W)	(NA)	2
Power plants .....	3 285 466	3 246 712	(NA)	38 753	3	2	(NA)	4
Sewage treatment and water treatment plants .....	523 475	496 697	(NA)	26 777	1	(W)	(NA)	3
Other nonbuilding construction .....	810 815	633 261	(NA)	177 559	3	3	(NA)	10
<b>Construction work, n.s.k.</b> .....	2 395 651	1 946 153	(NA)	449 496	1	1	(NA)	2

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction industries and land subdividers and developers -----</b>	<b>59 050</b>	<b>466 975</b>	<b>738 871</b>	<b>441 938</b>	<b>169 096</b>	<b>465 210</b>	<b>185 610</b>
15, 16, 17	<b>Construction industries:</b>							
15	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	10 627	39 562	53 876	37 392	12 342	40 420	13 739
1522	Other residential buildings -----	1 134	8 515	12 436	8 201	2 996	8 027	3 192
1531	Operative builders -----	2 051	10 499	17 066	10 224	4 050	10 774	4 327
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	797	8 013	13 263	7 394	2 973	7 956	3 294
1542	Nonresidential buildings, n.e.c. -----	3 651	36 212	60 163	34 433	14 104	35 416	14 884
16	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	839	15 237	25 420	12 246	4 684	15 232	6 538
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	53	1 642	2 930	1 560	658	1 651	721
1623	Water, sewer, and utility lines -----	1 063	16 023	27 199	14 006	5 845	15 603	6 653
1629	Heavy construction, n.e.c. -----	1 146	24 604	42 878	22 882	9 444	24 743	10 749
17	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	6 332	49 300	84 616	47 691	20 016	49 667	21 278
1721	Painting and paper hanging -----	3 660	18 422	27 079	16 808	6 062	18 355	6 677
1731	Electrical work -----	5 753	44 987	76 374	43 241	18 010	44 975	19 180
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	1 536	11 035	16 232	9 949	3 530	10 857	4 109
1742	Plastering, drywall, and insulation work ..	2 991	42 757	62 739	42 195	14 701	42 454	15 853
1743	Terrazzo, tile, marble, and mosaic work ..	979	6 124	9 339	5 760	2 137	5 958	2 319
175	Carpentry and floor work:							
1751	Carpentry -----	2 836	29 230	42 181	27 372	9 464	28 792	10 516
1752	Floor laying and other floor work -----	1 066	5 096	8 043	4 962	1 893	5 144	2 008
1761	Roofing, siding, and sheet metal work -----	2 625	22 173	33 192	21 042	7 535	21 453	8 068
1771	Concrete work -----	2 846	28 823	44 275	27 768	10 305	28 635	11 245
1781	Water well drilling -----	206	1 242	2 284	1 148	509	1 253	570
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	422	7 163	11 377	7 050	2 678	6 909	2 774
1793	Glass and glazing work -----	799	4 568	7 401	4 578	1 840	4 571	1 900
1794	Excavation work -----	890	8 137	14 147	7 368	2 981	8 284	3 685
1795	Wrecking and demolition work -----	135	2 139	2 306	2 091	533	2 124	579
1796	Installing building equipment, n.e.c. -----	349	4 366	7 955	4 648	2 038	4 336	1 988
1799	Special trade contractors, n.e.c. -----	3 021	19 694	32 135	18 542	7 274	20 060	8 245
6552	<b>Land subdividers and developers, n.e.c. --</b>	<b>1 232</b>	<b>1 383</b>	<b>1 950</b>	<b>1 376</b>	<b>479</b>	<b>1 548</b>	<b>505</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
491 068	197 326	469 683	186 838	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	(W)	15, 16, 17
														15
41 736 9 714	14 574 3 245	38 699 8 125	13 220 3 002	2 4	2 5	2 4	2 4	2 5	2 6	2 3	2 4	2 5	3 7	152 1521 1522
10 852	4 454	10 145	4 233	2	3	2	3	2	3	3	3	3	3	1531
														154
8 500 37 888	3 437 15 772	8 204 37 111	3 558 15 401	3 2	3 2	3 1	3 2	3 2	3 2	3 2	3 2	3 2	3 2	1541 1542
														16
17 063	7 503	16 408	6 694	1	2	1	2	1	2	1	2	1	2	1611
														162 1622
1 781 17 351 26 103	823 7 465 11 326	1 575 17 134 24 687	726 7 234 11 358	2 2 1	4 2 1	2 2 1	4 2 1	2 2 1	5 2 1	3 2 1	5 2 1	2 2 1	5 2 1	1623 1629
														17
50 785	22 110	49 057	21 210	1	1	1	1	1	1	1	1	1	1	1711
19 659	7 472	18 883	6 866	2	3	2	3	2	3	2	3	3	3	1721
46 511	20 077	45 228	19 105	1	1	1	1	2	2	1	1	1	1	1731
														174
														1741
12 223 44 376 6 500	4 414 16 740 2 491	11 117 42 004 6 278	4 179 15 443 2 391	3 1 3	3 2 3	3 1 3	3 2 3	3 1 3	3 2 4	5 2 3	3 2 4	3 2 3	3 2 4	1742 1743
31 105 5 405	11 470 2 156	29 653 4 872	10 728 1 984	2 3	2 4	3 3	3 4	2 3	2 5	2 3	3 4	2 3	2 5	175 1751 1752
22 831	8 801	23 366	8 786	2	2	2	3	2	3	2	3	2	3	1761
30 173	11 886	28 717	10 838	2	2	2	2	2	2	2	2	2	2	1771
1 340	627	1 226	577	4	5	3	5	3	5	4	5	4	5	1781
														179
7 576 4 517 8 681 2 181 4 223 20 559	3 144 1 788 3 986 596 1 932 8 517	7 120 4 606 8 217 2 159 4 260 19 636	2 780 1 872 3 493 597 1 996 8 098	2 7 3 2 2 2	3 7 3 6 3 3	2 7 4 2 3 2	4 7 4 6 5 3	2 7 3 2 2 2	3 7 3 6 3 3	2 7 2 3 2 2	3 7 3 6 3 3	2 7 3 3 2 3	3 7 4 6 4 3	1791 1793 1794 1795 1796 1799
1 424	507	1 185	457	9	10	8	9	10	10	11	11	11	10	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction Industries and land subdividers and developers</b> -----	<b>10.1</b>	<b>24.9</b>	<b>1 582.3</b>	<b>152.4</b>	<b>.209</b>	<b>.265</b>	<b>.297</b>	<b>.019</b>
15, 16, 17	<b>Construction Industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses -----	4.7	17.6	1 361.8	138.2	.162	.265	.353	.010
1522	Other residential buildings -----	9.7	22.9	1 460.5	236.2	.125	.168	.568	.007
1531	Operative builders -----	11.4	30.6	1 625.5	924.8	.074	.178	.522	.004
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	14.0	30.8	1 655.2	329.9	.130	.202	.532	.012
1542	Nonresidential buildings, n.e.c. -----	13.5	29.5	1 661.4	328.0	.122	.132	.636	.010
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction -----	22.3	33.3	1 668.3	195.3	.210	.321	.187	.065
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	36.6	28.8	1 784.4	183.7	.185	.208	.294	.022
1623	Water, sewer, and utility lines -----	18.0	27.2	1 697.5	131.2	.247	.320	.107	.048
1629	Heavy construction, n.e.c. -----	29.9	30.5	1 742.7	151.5	.280	.310	.136	.040
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning -----	10.2	27.5	1 716.3	121.2	.298	.368	.083	.016
1721	Painting and paper hanging -----	5.8	19.5	1 469.9	62.1	.364	.223	.051	.018
1731	Electrical work -----	10.0	27.6	1 697.7	108.2	.328	.370	.056	.014
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	8.2	21.0	1 471.0	78.9	.305	.362	.066	.012
1742	Plastering, drywall, and insulation work -----	16.3	22.0	1 467.3	73.1	.343	.325	.057	.014
1743	Terrazzo, tile, marble, and mosaic work -----	7.6	24.0	1 525.0	86.5	.338	.374	.038	.012
175	Carpentry and floor work:								
1751	Carpentry -----	11.7	19.9	1 443.1	78.1	.290	.395	.076	.014
1752	Floor laying and other floor work -----	6.2	23.8	1 578.3	122.3	.253	.440	.074	.015
1761	Roofing, siding, and sheet metal work -----	10.4	19.2	1 497.0	86.0	.275	.402	.030	.017
1771	Concrete work -----	11.7	22.9	1 536.1	96.5	.275	.361	.100	.028
1781	Water well drilling -----	7.8	24.5	1 839.0	118.9	.265	.407	.021	.017
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	20.8	29.6	1 588.3	116.4	.311	.336	.081	.022
1793	Glass and glazing work -----	8.1	23.9	1 620.2	125.4	.270	.505	.018	.022
1794	Excavation work -----	10.8	27.5	1 738.6	148.0	.220	.213	.107	.104
1795	Wrecking and demolition work -----	19.1	14.7	1 078.1	61.8	.285	.115	.064	.058
1796	Installing building equipment, n.e.c. -----	15.6	34.9	1 822.0	120.0	.362	.259	.046	.015
1799	Special trade contractors, n.e.c. -----	8.2	19.9	1 631.7	88.0	.284	.312	.101	.020
6552	<b>Land subdividers and developers, n.e.c.</b> -----	<b>5.4</b>	<b>24.2</b>	<b>1 410.0</b>	<b>799.2</b>	<b>.147</b>	<b>.106</b>	<b>.529</b>	<b>.008</b>

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>FRESNO, CA MSA</b>											
	Construction industries and land subdividers and developers .....	1 488	13 046	266 457	1 264 546	907 417	543 999	381 097	357 129	14 282	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings .....	15	644	6 655	58 234	26 660	11 573	16 042	31 574	250	18	12
1531	Operative builders .....	30	259	5 741	95 078	41 413	25 921	16 514	53 664	799	18	14
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	10	173	3 275	18 829	10 231	6 061	(D)	8 598	*285	32	25
1542	Nonresidential buildings, n.e.c. ....	93	1 481	34 447	286 165	115 807	61 370	(D)	170 358	918	11	6
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction .....	29	694	13 700	72 264	57 881	39 994	24 047	14 384	2 397	6	8
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines .....	23	380	11 423	53 185	44 636	22 454	(D)	8 549	951	5	4
1629	Heavy construction, n.e.c. ....	37	334	8 707	32 458	28 777	18 873	10 353	*3 681	*829	17	15
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning .....	161	1 348	29 150	95 620	93 239	51 911	42 149	2 380	1 336	5	5
1721	Painting and paper hanging .....	111	638	10 434	25 688	24 715	18 556	6 239	974	354	12	6
1731	Electrical work .....	105	1 035	24 886	79 272	77 188	45 239	33 927	2 084	778	6	9
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	45	220	4 638	16 346	15 464	9 969	5 495	882	(S)	12	10
1742	Plastering, drywall, and insulation work .....	92	1 726	43 744	121 555	112 667	78 482	34 946	8 889	787	7	6
1743	Terrazzo, tile, marble, and mosaic work .....	48	314	5 852	15 963	15 821	9 031	6 790	*142	(D)	7	6
175	Carpentry and floor work:											
1751	Carpentry .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork .....	24	112	2 635	7 850	7 209	4 127	3 396	*641	(S)	20	10
1761	Roofing, siding, and sheet metal work .....	45	272	4 701	22 823	21 762	12 389	(D)	1 061	331	23	15
1771	Concrete work .....	105	690	11 850	38 543	36 514	21 640	14 956	2 029	486	10	8
1781	Water well drilling .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	7	180	4 627	11 797	11 196	6 805	4 391	*601	204	1	5
1793	Glass and glazing work .....	16	125	2 655	9 177	9 083	4 908	4 699	*95	*42	15	26
1794	Excavation work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work .....	*11	34	765	3 789	3 318	2 422	*1 058	(S)	(D)	22	25
1796	Installing building equipment, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1799	Special trade contractors, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c. ....	22	88	*1 658	*19 952	5 574	4 125	*1 556	(S)	12	31	21
	<b>LOS ANGELES-ANAHEIM- RIVERSIDE, CA CMSA</b>											
	Construction industries and land subdividers and developers .....	23 733	274 151	6 866 178	33 891 613	23 305 405	15 484 322	8 722 219	10 586 208	380 498	1	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	3 089	16 642	308 378	2 040 208	1 268 939	771 540	526 801	771 269	18 784	3	6
1522	Other residential buildings .....	431	3 961	89 591	769 379	305 746	209 909	109 700	463 633	2 204	5	6
1531	Operative builders .....	793	11 154	375 915	5 674 079	2 548 492	1 966 714	888 725	3 125 587	49 253	2	2
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	382	5 457	169 741	1 325 766	586 470	351 391	276 066	739 296	5 930	4	3
1542	Nonresidential buildings, n.e.c. ....	1 515	21 118	632 806	5 359 256	1 775 998	1 305 739	641 898	3 583 257	27 876	2	2



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>LOS ANGELES-ANAHEIM- RIVERSIDE, CA CMSA—Con.</b>											
	<b>Construction industries and     land subdividers and     developers—Con.</b>											
15,16, 17 16	<b>Construction industries—Con.</b>											
	<b>Heavy construction other than     building construction—contractors:</b>											
1611	Highway and street construction -----	278	6 950	231 343	1 166 782	938 930	636 355	338 297	227 852	29 019	2	2
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	11	241	8 017	43 926	36 429	23 413	13 080	7 498	683	(D)	(D)
1623	Water, sewer, and utility lines -----	439	(D)	(D)	(D)	(D)	(D)	317 750	(D)	22 778	2	2
1629	Heavy construction, n.e.c. -----	430	10 241	310 838	1 185 727	1 024 534	695 712	354 239	161 194	25 259	2	2
17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	2 943	31 653	862 914	2 980 130	2 706 616	1 654 161	1 093 055	273 514	34 719	1	1
1721	Painting and paper hanging-----	1 397	9 085	179 567	503 888	474 513	365 384	111 003	29 375	9 275	3	3
1731	Electrical work -----	2 704	28 122	784 198	2 394 950	2 258 182	1 386 387	907 270	136 769	26 276	2	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	733	7 253	143 185	472 222	444 009	279 393	167 893	28 213	4 056	3	3
1742	Plastering, drywall, and insulation work-----	1 159	23 760	517 777	1 525 062	1 437 940	959 370	490 296	87 122	22 597	2	1
1743	Terrazzo, tile, marble, and mosaic work-----	348	3 134	78 164	241 041	225 562	142 382	88 098	15 479	4 513	4	7
175 1751 1752	Carpentry and floor work: Carpentry-----	1 240	18 733	360 543	1 200 529	1 115 579	638 674	491 485	84 949	11 485	3	3
	Floor laying and other floorwork-----	382	2 883	70 702	292 642	264 193	137 917	130 044	28 450	1 634	5	8
1761	Roofing, siding, and sheet metal work-----	1 141	13 208	252 437	943 611	918 219	539 294	382 812	25 392	15 407	3	2
1771	Concrete work -----	1 128	17 356	407 594	1 536 947	1 362 596	811 487	559 675	174 351	18 458	2	2
1781	Water well drilling -----	57	(D)	(D)	(D)	68 861	(D)	(D)	1 959	1 164	(D)	3
179	<b>Miscellaneous special trade     contractors:</b>											
1791	Structural steel erection -----	232	4 902	147 125	486 705	442 595	288 545	165 382	44 110	3 444	2	2
1793	Glass and glazing work -----	400	2 811	65 515	252 377	246 601	134 612	124 719	5 776	1 429	7	6
1794	Excavation work-----	326	4 852	142 081	636 324	573 189	459 854	124 601	63 135	18 580	4	3
1795	Wrecking and demolition work -----	65	1 699	22 246	70 162	66 152	58 936	8 688	4 011	2 230	3	5
1796	Installing building equipment, n.e.c.-----	144	2 865	95 133	262 662	250 968	193 151	66 471	11 694	1 492	3	2
1799	Special trade contractors, n.e.c.-----	1 412	12 386	245 483	882 426	787 815	535 065	273 498	94 610	15 788	3	3
6552	<b>Land subdividers and developers,     n.e.c.-----</b>	553	3 621	85 052	560 261	254 746	273 035	38 911	305 515	6 167	10	13
	<b>ANAHEIM-SANTA ANA, CA PMSA</b>											
	<b>Construction industries and     land subdividers and     developers-----</b>	5 096	69 831	1 853 076	9 667 918	6 072 501	3 979 061	2 467 901	3 595 417	94 189	1	1
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General     contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses -----	637	4 001	75 689	474 576	296 090	183 057	118 740	178 486	4 160	5	6
1522	Other residential buildings -----	99	835	20 982	191 622	73 192	54 263	24 751	118 430	489	11	9
1531	Operative builders -----	176	3 593	148 602	2 077 303	760 593	567 589	382 681	1 316 710	12 978	2	2
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	109	1 634	48 815	383 513	156 179	100 587	83 079	227 334	1 815	5	5
1542	Nonresidential buildings, n.e.c.-----	340	4 836	149 931	1 513 446	407 293	309 276	(D)	1 106 153	4 467	3	4
16	<b>Heavy construction other than     building construction—contractors:</b>											
1611	Highway and street construction -----	41	968	33 149	189 005	150 867	88 511	64 905	38 138	7 158	7	5
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1623	Water, sewer, and utility lines -----	106	1 881	47 222	201 387	180 849	121 858	(D)	20 537	3 021	7	5
1629	Heavy construction, n.e.c. -----	93	3 224	119 429	337 220	292 992	164 893	131 739	44 228	3 881	3	5

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>ANAHEIM-SANTA ANA, CA PMSA—Con.</b>											
	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
15,16, 17 17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	557	7 294	206 412	767 680	656 890	388 981	275 102	110 790	8 743	3	2
1721	Painting and paper hanging-----	301	2 356	49 807	137 433	129 691	100 043	29 692	7 743	2 537	5	6
1731	Electrical work -----	557	7 271	211 640	648 997	610 829	351 218	265 041	*38 168	5 357	2	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	186	1 873	37 691	122 614	116 197	73 404	43 276	6 418	994	7	5
1742	Plastering, drywall, and insulation work -----	243	5 010	122 632	400 244	378 195	264 184	116 078	22 049	8 436	4	2
1743	Terrazzo, tile, marble, and mosaic work -----	101	753	18 613	61 813	56 229	33 625	23 086	*5 584	1 567	6	10
175	Carpentry and floor work:											
1751	Carpentry-----	267	6 234	131 121	384 627	366 597	207 047	165 753	18 030	2 926	2	2
1752	Floor laying and other floorwork-----	76	899	24 169	91 125	85 727	44 659	42 693	5 399	428	8	6
1761	Roofing, siding, and sheet metal work -----	208	3 313	65 145	234 630	230 829	136 968	96 169	3 801	4 388	5	4
1771	Concrete work -----	259	5 805	141 667	487 002	440 476	263 304	179 434	46 526	6 507	3	2
1781	Water well drilling -----	6	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	43	671	17 188	60 501	55 073	36 046	20 151	5 428	282	9	7
1793	Glass and glazing work-----	96	770	20 206	85 658	83 305	43 518	43 497	2 353	(D)	21	17
1794	Excavation work-----	88	1 448	45 874	210 454	193 551	151 639	46 543	16 902	8 021	6	4
1795	Wrecking and demolition work-----	14	(D)	(D)	(D)	(D)	(D)	(D)	(D)	401	(D)	(D)
1796	Installing building equipment, n.e.c.-----	39	558	16 036	51 559	49 804	42 274	(D)	1 755	428	9	4
1799	Special trade contractors, n.e.c.-----	(S)	(D)	(S)	(S)	(S)	(D)	(S)	(S)	(S)	(D)	(S)
6552	Land subdividers and developers, n.e.c.-----	143	1 741	46 044	342 914	115 273	130 062	15 277	227 641	1 919	19	14
	<b>LOS ANGELES-LONG BEACH, CA PMSA</b>											
	Construction industries and land subdividers and developers-----	11 990	135 471	3 494 693	17 238 983	11 908 312	8 022 093	4 266 595	5 330 671	176 528	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses-----	1 521	8 049	150 093	1 011 504	619 975	380 301	257 492	391 529	6 851	4	11
1522	Other residential buildings-----	256	2 519	57 491	474 914	189 760	132 906	64 107	285 154	1 219	6	9
1531	Operative builders-----	468	5 329	166 282	2 686 337	1 420 449	1 077 302	413 550	1 265 888	31 897	4	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	195	2 871	95 050	782 068	355 460	203 132	162 331	426 608	2 469	7	4
1542	Nonresidential buildings, n.e.c.-----	822	13 449	412 202	3 294 920	1 142 376	836 646	417 592	2 152 544	19 534	3	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction-----	130	2 196	68 546	386 424	322 142	224 197	110 706	64 282	7 690	5	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	5	125	3 605	21 462	18 868	12 296	6 623	2 595	(D)	21	17
1623	Water, sewer, and utility lines-----	136	3 894	124 745	477 697	435 230	290 200	148 200	42 467	8 539	3	2
1629	Heavy construction, n.e.c.-----	140	4 706	126 208	547 283	481 812	355 192	142 100	65 471	8 873	2	2



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	<b>LOS ANGELES-LONG BEACH, CA PMSA—Con.</b>											
	Construction Industries and land subdividers and developers—Con. Construction Industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air- conditioning .....	1 637	18 039	510 321	1 705 667	1 566 156	973 436	616 666	139 511	18 849	2	1
	1721 Painting and paper hanging .....	743	4 582	94 294	269 373	253 191	195 785	57 858	16 182	4 637	5	4
	1731 Electrical work .....	1 482	15 182	438 600	1 320 644	1 234 986	784 145	477 012	85 658	14 546	2	2
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework .....	310	3 376	61 225	196 208	189 013	116 226	74 883	7 195	2 284	5	4
	1742 Plastering, drywall, and insulation work .....	508	10 332	240 125	694 878	651 894	434 800	224 379	42 985	6 994	2	2
	1743 Terrazzo, tile, marble, and mosaic work .....	151	1 683	45 156	140 098	130 909	84 456	50 214	9 189	1 883	7	10
	175 Carpentry and floor work:											
	1751 Carpentry .....	595	6 715	118 902	396 007	355 350	211 145	147 376	40 657	3 191	7	8
	1752 Floor laying and other floorwork .....	221	1 489	36 201	151 818	133 271	74 232	60 011	18 547	721	4	11
	1761 Roofing, siding, and sheet metal work .....	590	6 429	132 305	483 243	467 324	279 677	188 709	15 920	6 284	3	3
	1771 Concrete work .....	455	6 352	166 062	653 498	559 994	340 784	222 097	93 504	7 313	4	3
	1781 Water well drilling .....	19	236	4 257	17 297	17 017	12 128	5 406	280	402	10	11
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection .....	119	2 662	81 017	263 026	238 894	155 928	91 314	24 132	2 088	3	3
	1793 Glass and glazing work .....	214	1 445	31 848	107 124	105 008	62 071	50 505	2 116	(D)	7	5
	1794 Excavation work .....	121	1 792	59 123	241 185	212 351	171 310	44 479	28 834	4 753	4	2
	1795 Wrecking and demolition work .....	43	1 333	14 149	44 478	41 955	37 144	6 180	2 523	1 694	3	5
	1796 Installing building equipment, n.e.c. ....	86	2 144	75 800	199 546	189 853	141 877	54 727	9 694	830	2	2
	1799 Special trade contractors, n.e.c. ....	705	6 951	147 811	498 488	460 784	314 400	157 753	37 704	9 415	4	4
	6552 Land subdividers and developers, n.e.c. ....	317	1 589	33 275	173 795	114 293	120 380	14 326	59 502	2 948	7	25
	<b>OXNARD-VENTURA, CA PMSA</b>											
	Construction Industries and land subdividers and developers .....	1 349	13 281	315 842	1 260 160	1 037 709	667 221	391 327	222 451	20 425	3	2
	Construction Industries:											
	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1522 Other residential buildings .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1531 Operative builders .....	21	199	7 057	39 990	16 056	14 957	3 849	23 934	522	15	29
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses .....	25	281	7 617	45 805	21 937	14 419	7 973	23 868	*310	21	14
	1542 Nonresidential buildings, n.e.c. ....	90	509	12 258	97 780	49 856	35 098	(D)	47 924	512	13	16
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction .....	17	671	32 055	122 295	106 644	70 878	38 634	15 651	3 610	2	1
	162 Heavy construction, except highway: Bridge, tunnel, and elevated highway construction .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1623 Water, sewer, and utility lines .....	30	531	16 517	58 079	54 803	35 881	19 189	3 275	1 141	3	3
	1629 Heavy construction, n.e.c. ....	52	759	21 994	110 529	82 264	58 262	24 369	28 266	5 340	7	5

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>OXNARD-VENTURA, CA PMSA— Con.</b>											
	<b>Construction Industries and land subdividers and developers—Con. Construction Industries—Con.</b>											
15,16, 17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	160	1 219	30 742	109 353	104 249	61 006	45 083	5 104	974	7	6
1721	Painting and paper hanging-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1731	Electrical work -----	127	1 211	34 295	105 632	103 539	62 710	42 293	2 094	780	10	11
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	46	398	8 834	31 618	30 889	18 263	(D)	729	(D)	16	14
1742	Plastering, drywall, and insulation work-----	57	1 575	29 608	80 345	77 441	48 565	30 186	2 904	*1 361	13	8
1743	Terrazzo, tile, marble, and mosaic work-----	31	340	8 664	21 650	21 391	14 878	(D)	(S)	258	10	9
175	Carpentry and floor work:											
1751	Carpentry-----	69	1 317	24 518	96 707	93 042	57 059	38 004	3 665	474	11	16
1752	Floor laying and other floorwork-----	*17	88	*1 672	*5 194	*4 996	*2 887	*2 920	*198	*124	39	47
1761	Roofing, siding, and sheet metal work-----	60	422	5 243	21 402	20 916	11 077	9 839	*486	*485	22	16
1771	Concrete work -----	125	1 020	17 677	67 749	64 643	37 564	27 132	3 106	464	9	11
1781	Water well drilling -----	8	58	1 475	4 673	(D)	3 121	1 627	(D)	(D)	31	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	9	248	8 195	19 888	(D)	13 379	(D)	(D)	381	3	(D)
1793	Glass and glazing work-----	29	80	1 856	8 426	8 361	3 799	(D)	65	(D)	14	16
1794	Excavation work-----	24	224	4 440	20 569	18 421	13 944	4 551	*2 148	(S)	29	29
1795	Wrecking and demolition work-----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1799	Special trade contractors, n.e.c.-----	68	575	13 179	43 017	35 669	22 554	14 429	7 348	220	9	7
6552	Land subdividers and developers, n.e.c.-----	16	43	1 384	*15 027	4 557	6 781	(D)	*10 470	(D)	17	8
	<b>RIVERSIDE-SAN BERNARDINO, CA PMSA</b>											
	<b>Construction Industries and land subdividers and developers-----</b>	5 297	55 546	1 201 843	5 722 276	4 284 819	2 814 762	1 595 516	1 437 457	89 355	1	1
15,16, 17	<b>Construction Industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses-----	769	3 699	66 201	457 424	287 240	169 873	122 429	170 184	6 179	5	8
1522	Other residential buildings-----	73	493	9 552	90 984	36 065	18 721	17 976	*54 919	390	12	16
1531	Operative builders-----	127	2 033	53 974	870 449	351 394	306 866	88 645	519 055	3 856	6	5
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	53	671	18 259	114 380	52 894	33 254	22 684	61 485	1 337	15	11
1542	Nonresidential buildings, n.e.c.-----	264	2 324	58 415	453 109	176 473	124 718	54 384	276 637	3 363	8	6
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction-----	91	3 114	97 594	469 058	359 277	252 769	124 052	109 780	10 561	3	5
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	4	72	2 565	11 999	9 044	5 831	(D)	2 955	(D)	(W)	(W)
1623	Water, sewer, and utility lines-----	166	3 033	72 368	276 572	250 650	178 479	(D)	25 923	10 077	4	6
1629	Heavy construction, n.e.c.-----	145	1 552	43 206	190 696	167 466	117 365	56 031	23 230	7 165	6	5



Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>RIVERSIDE-SAN BERNARDINO, CA PMSA—Con.</b>											
	<b>Construction industries and land subdividers and developers—Con.</b>											
15,16, 17	<b>Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning .....	588	5 079	114 716	395 153	377 256	229 553	155 324	17 897	6 153	3	3
1721	Painting and paper hanging .....	256	1 719	28 921	80 766	76 312	58 389	19 300	4 455	1 878	9	7
1731	Electrical work .....	539	4 458	99 663	319 676	308 828	188 314	122 924	10 849	5 593	6	6
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	190	1 605	35 435	121 782	107 910	71 499	(D)	13 872	(D)	6	8
1742	Plastering, drywall, and insulation work .....	352	6 843	125 412	349 596	330 411	211 821	119 654	19 185	5 805	3	2
1743	Terrazzo, tile, marble, and mosaic work .....	66	359	5 731	17 480	17 033	9 423	(D)	*447	*805	15	15
175	Carpentry and floor work:											
1751	Carpentry .....	310	4 468	86 002	323 187	300 591	163 423	140 352	22 596	4 895	3	3
1752	Floor laying and other floorwork .....	67	406	8 660	44 505	40 199	16 139	24 421	*4 306	361	21	32
1761	Roofing, siding, and sheet metal work .....	283	3 043	49 745	204 335	199 149	111 572	88 094	5 185	4 251	7	5
1771	Concrete work .....	290	4 178	82 189	328 698	297 483	169 835	131 013	31 215	4 173	5	5
1781	Water well drilling .....	24	277	7 124	26 750	(D)	16 913	10 796	(D)	737	5	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	61	1 322	40 725	143 290	(D)	83 192	(D)	(D)	693	4	(D)
1793	Glass and glazing work .....	61	517	11 605	51 169	49 927	25 224	(D)	1 242	935	9	7
1794	Excavation work .....	93	1 389	32 644	164 116	148 866	122 961	29 027	15 250	*5 594	9	11
1795	Wrecking and demolition work .....	*6	*82	*1 831	5 646	(D)	*4 819	*679	(D)	(D)	47	(D)
1796	Installing building equipment, n.e.c. ....	18	122	2 725	9 918	9 815	7 503	(D)	103	*234	24	11
1799	Special trade contractors, n.e.c. ....	326	2 440	42 233	173 015	147 568	100 496	49 791	25 447	3 074	7	7
6552	Land subdividers and developers, n.e.c. ....	77	249	4 349	28 525	20 624	15 811	(D)	7 901	(D)	17	14
	<b>SACRAMENTO, CA MSA</b>											
	<b>Construction industries and land subdividers and developers .....</b>	<b>3 827</b>	<b>32 855</b>	<b>760 655</b>	<b>3 879 670</b>	<b>2 642 542</b>	<b>1 640 609</b>	<b>1 069 622</b>	<b>1 237 127</b>	<b>70 759</b>	<b>1</b>	<b>1</b>
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses .....	747	3 329	50 733	300 595	208 795	127 900	88 715	91 800	2 960	8	8
1522	Other residential buildings .....	66	1 218	37 503	306 946	106 269	62 671	44 944	200 677	792	4	5
1531	Operative builders .....	136	914	23 796	300 001	153 528	107 465	52 820	146 473	3 339	14	10
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	55	833	20 045	148 565	86 979	37 129	54 477	61 585	(D)	7	5
1542	Nonresidential buildings, n.e.c. ....	242	3 369	88 097	802 617	286 366	199 715	94 226	516 250	4 345	4	3
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction .....	49	1 504	51 823	219 876	196 271	92 560	(D)	23 605	21 088	3	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	9	504	15 168	92 317	62 021	47 059	(D)	30 296	1 796	2	2
1623	Water, sewer, and utility lines .....	68	639	16 876	86 691	74 446	43 828	31 320	12 245	1 044	10	8
1629	Heavy construction, n.e.c. ....	58	651	19 921	92 138	70 096	45 614	(D)	22 042	6 978	9	15

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Thousands dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix.												
1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	<b>SACRAMENTO, CA MSA—Con.</b>											
	<b>Construction industries and land subdividers and developers—Con.</b>											
	<b>Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
	1711 Plumbing, heating, and air- conditioning-----	378	3 740	87 168	316 249	295 814	164 108	134 060	20 435	2 985	3	4
	1721 Painting and paper hanging-----	213	1 097	18 416	49 637	47 771	35 090	(D)	1 866	1 145	10	7
	1731 Electrical work -----	352	3 156	79 638	249 576	233 955	142 661	93 329	15 622	4 174	3	3
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1742 Plastering, drywall, and insulation work -----	196	2 702	51 544	163 526	150 647	96 547	(D)	*12 879	1 498	6	5
	1743 Terrazzo, tile, marble, and mosaic work -----	66	489	10 633	30 638	29 801	18 848	(D)	837	780	10	9
	175 Carpentry and floor work:											
	1751 Carpentry -----	204	1 071	20 702	71 481	65 366	39 708	27 393	6 115	1 347	9	7
	1752 Floor laying and other floorwork-----	41	318	7 262	26 289	(D)	11 597	12 551	(D)	220	14	(D)
	1761 Roofing, siding, and sheet metal work -----	163	1 236	24 538	98 692	96 113	62 061	37 788	2 579	*1 752	7	8
	1771 Concrete work -----	195	1 615	38 850	122 765	114 953	72 016	43 296	7 812	2 684	6	6
	1781 Water well drilling -----	22	211	5 262	19 952	19 681	12 184	7 909	271	655	8	13
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection -----	25	518	13 081	41 891	40 944	29 185	11 994	947	652	4	3
	1793 Glass and glazing work -----	43	234	5 541	25 478	25 264	13 694	12 747	214	*206	10	4
	1794 Excavation work -----	50	395	7 609	51 218	45 541	40 211	8 509	5 677	*1 332	20	9
	1795 Wrecking and demolition work -----	5	47	1 056	5 129	(D)	4 057	581	(D)	(D)	(W)	(D)
	1796 Installing building equipment, n.e.c. -----	14	164	6 758	19 735	19 192	15 340	(D)	543	(D)	(W)	(W)
	1799 Special trade contractors, n.e.c.-----	259	1 856	33 176	122 546	111 814	75 798	39 634	10 732	*2 607	8	10
	6552 Land subdividers and developers, n.e.c. -----	58	275	7 616	61 445	23 231	16 797	6 991	38 215	153	12	25
	<b>SAN DIEGO, CA MSA</b>											
15,16, 17	<b>Construction industries and land subdividers and developers-----</b>	<b>5 091</b>	<b>58 835</b>	<b>1 342 232</b>	<b>6 267 019</b>	<b>4 434 057</b>	<b>2 855 380</b>	<b>1 700 241</b>	<b>1 832 961</b>	<b>81 760</b>	<b>1</b>	<b>1</b>
	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
	152 General contractors, residential buildings:											
	1521 Single-family houses -----	858	5 795	100 503	576 711	386 632	228 356	167 163	190 080	6 202	7	7
	1522 Other residential buildings -----	104	1 358	28 527	204 686	123 822	86 883	39 067	80 864	1 576	12	6
	1531 Operative builders -----	175	2 076	58 726	743 308	364 372	265 562	113 026	378 936	4 935	5	5
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses -----	38	1 127	35 626	266 610	121 815	82 869	(D)	144 796	5 000	5	5
	1542 Nonresidential buildings, n.e.c. -----	307	5 200	132 118	1 039 821	403 796	278 261	131 198	636 025	4 037	3	4
	<b>16 Heavy construction other than building construction—contractors:</b>											
	1611 Highway and street construction -----	67	1 266	40 593	182 047	152 428	90 038	(D)	29 618	7 194	5	3
	162 Heavy construction, except highway:											
1622 Bridge, tunnel, and elevated highway construction-----	*11	337	5 234	22 675	18 022	15 176	(D)	4 653	*168	7	20	
1623 Water, sewer, and utility lines -----	71	1 222	37 076	146 347	132 769	90 201	45 460	13 578	4 290	5	4	
1629 Heavy construction, n.e.c. -----	103	1 579	50 514	194 146	162 329	116 880	54 696	31 817	11 089	6	4	



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>SAN DIEGO, CA MSA—Con.</b>											
15,16, 17	Construction industries and land subdividers and developers—Con. Construction Industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	523	6 434	166 516	538 879	502 341	309 133	202 776	36 537	7 296	3	2
1721	Painting and paper hanging-----	281	1 909	31 997	85 683	82 622	61 742	(D)	3 061	1 487	8	5
1731	Electrical work -----	486	4 777	114 338	402 831	359 567	197 763	166 482	*43 265	5 474	4	4
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	132	1 003	22 962	69 758	66 394	40 989	25 509	3 364	1 151	8	8
1742	Plastering, drywall, and insulation work-----	303	6 296	128 523	350 714	334 708	215 560	127 421	16 006	3 803	3	2
1743	Terrazzo, tile, marble, and mosaic work-----	92	934	19 797	56 558	56 036	34 763	21 922	521	300	8	10
175	Carpentry and floor work:											
1751	Carpentry-----	334	4 070	74 957	261 327	235 112	131 725	105 550	26 215	1 669	7	4
1752	Floor laying and other floorwork-----	79	633	12 407	39 475	36 525	21 316	16 080	2 950	447	13	6
1761	Roofing, siding, and sheet metal work-----	211	2 564	44 992	157 643	153 712	84 508	69 654	3 931	2 018	7	4
1771	Concrete work -----	286	4 039	86 197	317 165	280 281	163 559	118 183	36 884	4 940	4	2
1781	Water well drilling -----	16	(D)	(D)	(D)	(D)	(D)	1 674	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	41	862	22 529	68 844	63 612	48 201	22 781	5 233	398	7	5
1793	Glass and glazing work-----	55	588	15 715	55 361	54 816	33 945	26 009	545	659	7	10
1794	Excavation work-----	101	1 207	28 932	142 226	116 919	93 011	32 471	*25 308	3 964	5	4
1795	Wrecking and demolition work-----	3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.-----	26	338	11 613	36 349	35 681	25 073	10 972	668	462	12	13
1799	Special trade contractors, n.e.c.-----	259	2 320	48 417	159 945	143 200	99 561	50 448	16 745	2 336	7	7
6552	Land subdividers and developers, n.e.c.-----	131	789	20 718	138 715	37 575	33 172	17 278	101 141	556	9	11
	<b>SAN FRANCISCO-OAKLAND- SAN JOSE, CA CMSA</b>											
	Construction industries and land subdividers and developers-----	14 430	150 979	4 255 369	19 093 665	13 584 705	8 924 847	5 039 954	5 508 960	229 655	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses-----	3 173	14 226	270 164	1 516 638	1 002 890	650 284	404 065	513 748	19 841	3	3
1522	Other residential buildings-----	244	2 604	62 186	465 752	204 206	122 511	86 503	261 546	1 848	9	8
1531	Operative builders-----	557	5 392	175 027	2 109 275	1 109 012	691 109	493 013	1 000 263	17 807	3	3
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	205	2 833	95 040	727 734	340 248	226 703	124 273	387 486	2 597	4	4
1542	Nonresidential buildings, n.e.c.-----	941	13 570	460 854	3 645 973	1 341 869	870 546	510 906	2 304 104	14 561	2	2
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction-----	191	(D)	(D)	(D)	(D)	(D)	214 183	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	15	(D)	12 712	(D)	47 534	(D)	(D)	20 849	800	(D)	(D)
1623	Water, sewer, and utility lines-----	261	(D)	(D)	(D)	496 766	319 972	(D)	69 538	16 733	3	2
1629	Heavy construction, n.e.c.-----	273	15 952	497 308	1 710 960	1 502 369	964 599	563 317	208 590	42 876	(D)	(W)

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>SAN FRANCISCO-OAKLAND- SAN JOSE, CA CMSA—Con.</b>											
15,16, 17	<b>Construction industries and land subdividers and developers—Con. Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	1 317	14 538	473 689	1 483 014	1 345 050	857 980	507 204	137 964	16 827	1	1
1721	Painting and paper hanging-----	1 110	6 465	144 182	378 341	362 850	285 100	80 182	15 491	6 077	4	5
1731	Electrical work -----	1 297	15 383	478 722	1 365 928	1 306 419	861 976	463 338	59 509	12 591	2	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	272	2 223	61 147	204 132	184 377	111 318	73 165	19 754	2 284	5	5
1742	Plastering, drywall, and insulation work-----	621	9 012	241 703	665 062	631 570	437 513	202 405	33 492	5 498	3	2
1743	Terrazzo, tile, marble, and mosaic work-----	230	1 820	49 499	133 230	131 085	83 882	48 962	2 146	2 554	4	4
175	Carpentry and floor work:											
1751	Carpentry-----	590	6 758	160 114	501 375	462 641	279 645	191 463	38 734	3 983	4	3
1752	Floor laying and other floorwork-----	361	1 980	50 504	195 904	186 596	108 598	82 516	9 307	1 996	4	4
1761	Roofing, siding, and sheet metal work-----	693	7 018	154 628	506 768	486 531	307 232	193 026	20 237	6 839	3	2
1771	Concrete work -----	580	6 581	166 612	563 667	519 510	337 978	186 206	44 157	9 606	3	2
1781	Water well drilling -----	31	256	6 411	19 650	19 438	13 997	7 527	212	638	(W)	(W)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	73	(D)	(D)	(D)	(D)	97 964	(D)	12 501	1 541	(D)	(D)
1793	Glass and glazing work-----	207	2 137	53 078	182 780	179 519	96 047	92 546	3 262	1 217	16	15
1794	Excavation work-----	190	2 083	63 118	286 866	262 094	202 581	68 703	24 772	8 939	4	3
1795	Wrecking and demolition work-----	34	636	10 750	41 537	38 699	37 777	3 871	2 838	836	2	5
1796	Installing building equipment, n.e.c.-----	98	1 724	69 480	181 813	171 391	127 480	46 527	10 422	2 232	4	2
1799	Special trade contractors, n.e.c.-----	600	5 159	115 073	378 008	339 411	237 216	111 259	38 597	7 065	4	5
6552	Land subdividers and developers, n.e.c.-----	269	1 295	35 347	258 939	158 483	149 671	38 394	98 455	2 247	9	6
	<b>OAKLAND, CA PMSA</b>											
	<b>Construction industries and land subdividers and developers-----</b>	<b>4 363</b>	<b>48 740</b>	<b>1 395 341</b>	<b>8 414 026</b>	<b>4 864 529</b>	<b>3 135 055</b>	<b>1 680 889</b>	<b>1 749 496</b>	<b>84 640</b>	<b>1</b>	<b>1</b>
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses-----	967	4 749	93 048	558 661	346 321	249 015	132 417	212 339	9 349	4	4
1522	Other residential buildings-----	50	405	10 642	86 237	35 830	22 492	14 286	50 408	(S)	19	19
1531	Operative builders-----	147	2 762	93 431	1 193 509	803 299	369 142	262 136	590 210	9 411	3	4
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	51	967	32 019	203 128	108 026	69 876	38 389	95 102	1 071	5	3
1542	Nonresidential buildings, n.e.c.-----	243	3 295	108 244	741 038	356 456	228 849	135 388	384 582	4 002	4	5
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction-----	63	1 665	65 177	337 558	256 270	174 912	83 489	81 288	8 854	3	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	8	112	3 922	20 249	14 931	9 991	5 026	5 318	(D)	11	15
1623	Water, sewer, and utility lines-----	96	2 032	56 555	229 199	199 617	124 882	75 642	29 582	8 778	3	4
1629	Heavy construction, n.e.c.-----	81	2 545	91 636	330 304	270 255	214 453	78 262	60 050	7 527	1	1



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>OAKLAND, CA PMSA—Con.</b>											
	<b>Construction industries and land subdividers and developers—Con.</b>											
15,16, 17 17	<b>Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	382	5 203	174 697	535 111	477 090	301 557	185 511	58 021	4 916	2	2
1721	Painting and paper hanging-----	363	2 376	51 706	131 567	126 691	99 874	27 721	4 876	2 191	7	5
1731	Electrical work-----	413	5 470	162 157	471 795	455 253	305 741	155 351	16 542	3 697	2	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	64	937	34 158	119 115	(D)	58 788	42 279	(D)	1 269	5	(D)
1742	Plastering, drywall, and insulation work-----	192	2 286	59 090	165 968	159 842	109 485	51 245	6 127	1 408	5	3
1743	Terrazzo, tile, marble, and mosaic work-----	68	508	15 004	42 008	41 126	26 836	(D)	882	*1 515	11	10
175	Carpentry and floor work:											
1751	Carpentry-----	172	2 498	59 049	186 777	175 635	103 707	(D)	11 142	1 754	8	5
1752	Floor laying and other floorwork-----	112	588	16 412	78 397	74 046	41 570	33 447	4 351	848	8	7
1761	Roofing, siding, and sheet metal work-----	226	2 416	49 239	158 609	153 109	100 507	55 929	5 500	2 590	6	4
1771	Concrete work-----	164	2 351	57 778	190 326	(D)	118 646	58 831	(D)	3 388	5	(D)
1781	Water well drilling-----	6	32	638	1 906	1 864	1 290	753	42	(D)	(W)	-
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	26	751	26 057	81 677	74 513	50 818	(D)	7 164	603	6	2
1793	Glass and glazing work-----	74	702	18 946	65 238	63 795	33 570	30 589	1 443	644	8	6
1794	Excavation work-----	74	830	26 191	110 779	96 288	77 261	20 804	14 491	3 554	7	6
1795	Wrecking and demolition work-----	10	277	5 754	23 275	21 780	21 097	(D)	1 495	(D)	(W)	(W)
1796	Installing building equipment, n.e.c.-----	27	701	29 332	83 985	78 681	57 745	21 944	5 304	1 614	1	(W)
1799	Special trade contractors, n.e.c.-----	215	1 861	44 063	140 690	124 869	86 629	42 303	15 821	3 041	7	7
6552	Land subdividers and developers, n.e.c.-----	69	422	10 395	126 920	73 041	76 323	15 551	53 879	1 433	16	5
	<b>SAN FRANCISCO, CA PMSA</b>											
	<b>Construction industries and land subdividers and developers-----</b>	3 987	50 035	1 443 555	6 114 284	4 200 470	2 683 449	1 602 271	1 913 814	69 854	1	1
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses-----	909	4 193	80 750	419 110	286 465	175 561	119 552	132 645	3 095	5	5
1522	Other residential buildings-----	105	1 453	33 561	237 436	105 569	63 013	(D)	131 868	*781	13	13
1531	Operative builders-----	176	1 171	34 496	266 483	148 301	97 514	70 121	118 182	900	9	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	55	589	19 488	147 707	65 598	41 537	24 714	82 110	347	7	12
1542	Nonresidential buildings, n.e.c.-----	353	5 905	211 704	1 680 205	537 761	308 247	236 930	1 142 444	3 887	3	3
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction-----	33	1 005	31 948	130 573	106 774	77 191	32 535	23 799	5 590	5	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines-----	29	658	17 288	73 654	65 330	43 872	21 898	8 324	*338	7	4
1629	Heavy construction, n.e.c.-----	49	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	<b>SAN FRANCISCO, CA PMSA— Con.</b>											
	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air- conditioning .....	403	4 121	138 093	426 094	384 502	251 406	137 408	41 592	4 917	2	2
	1721 Painting and paper hanging .....	323	1 983	47 708	115 705	110 761	86 545	24 724	4 944	2 178	5	4
	1731 Electrical work .....	408	4 292	143 129	375 197	362 938	248 785	120 282	12 259	4 112	5	3
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework .....	67	539	13 127	38 513	37 656	25 574	12 082	857	371	17	15
	1742 Plastering, drywall, and insulation work .....	124	2 376	62 926	176 655	167 065	117 029	54 728	9 591	1 254	3	2
	1743 Terrazzo, tile, marble, and mosaic work .....	49	507	12 558	33 285	32 887	19 085	14 432	398	433	7	4
	175 Carpentry and floor work:											
	1751 Carpentry .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1752 Floor laying and other floorwork .....	72	521	13 831	49 895	48 484	29 733	20 096	1 411	*385	8	5
	1761 Roofing, siding, and sheet metal work .....	168	1 784	44 823	137 738	129 895	87 949	42 909	7 843	1 297	5	4
	1771 Concrete work .....	84	945	21 716	72 888	(D)	44 863	(D)	(D)	1 882	13	(D)
	1781 Water well drilling .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection .....	15	280	8 980	24 664	23 129	13 469	(D)	1 535	(D)	2	4
	1793 Glass and glazing work .....	53	500	10 731	34 158	33 783	19 926	17 216	375	*257	24	8
	1794 Excavation work .....	26	694	18 991	89 090	84 347	54 337	(D)	4 743	2 462	2	2
	1795 Wrecking and demolition work .....	14	286	2 933	11 518	10 617	9 969	(D)	901	(D)	2	5
	1796 Installing building equipment, n.e.c. ....	51	827	31 132	74 245	69 737	54 515	16 693	4 508	408	8	5
	1799 Special trade contractors, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
6552	Land subdividers and developers, n.e.c. ....	107	525	16 894	98 970	66 093	56 727	19 008	32 877	*564	13	11
15,16, 17	<b>SAN JOSE, CA PMSA</b>											
	Construction industries and land subdividers and developers .....	2 888	31 012	911 477	4 170 375	2 939 956	1 966 567	1 066 568	1 230 419	31 853	2	1
	Construction industries:											
	Building construction—General contractors and operative builders:											
	152 General contractors, residential buildings:											
	1521 Single-family houses .....	468	2 266	46 433	262 489	174 638	105 300	71 678	87 852	1 780	7	8
	1522 Other residential buildings .....	52	384	11 068	84 887	32 836	20 252	13 212	52 051	*262	24	9
	1531 Operative builders .....	130	868	32 686	474 421	258 766	155 055	125 751	215 655	1 475	9	6
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses .....	44	753	28 561	286 863	109 082	87 960	25 618	177 782	636	8	8
	1542 Nonresidential buildings, n.e.c. ....	163	2 833	97 501	813 559	301 006	240 048	83 744	512 553	4 996	4	4
	16 Heavy construction other than building construction—contractors:											
	1611 Highway and street construction .....	49	955	32 702	165 290	128 341	85 103	47 915	36 949	1 854	5	4
	162 Heavy construction, except highway: 1622 Bridge, tunnel, and elevated highway construction .....	4	233	7 824	44 850	(D)	21 209	9 280	(D)	(D)	(W)	(D)
	1623 Water, sewer, and utility lines .....	58	695	19 646	81 348	72 611	40 579	(D)	8 738	2 089	10	6
	1629 Heavy construction, n.e.c. ....	50	557	15 619	68 217	59 534	43 773	16 386	8 682	534	12	5



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>SAN JOSE, CA PMSA—Con.</b>											
	Construction industries and land subdividers and developers—Con.											
15,16, 17	Construction industries—Con.											
	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	268	3 438	113 670	365 896	336 797	213 042	127 875	29 099	4 224	2	3
1721	Painting and paper hanging-----	232	1 400	32 629	81 575	(D)	61 610	16 546	(D)	864	7	(D)
1731	Electrical work -----	230	3 980	136 069	383 402	363 385	232 740	134 885	20 016	2 951	2	1
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1742	Plastering, drywall, and insulation work-----	167	3 026	86 547	225 151	214 213	149 867	66 495	10 938	1 548	5	3
1743	Terrazzo, tile, marble, and mosaic work-----	64	506	14 498	36 139	35 543	23 858	12 326	596	361	2	2
175	Carpentry and floor work:											
1751	Carpentry-----	112	1 323	33 149	104 418	100 185	58 074	43 945	4 233	746	4	3
1752	Floor laying and other floorwork-----	108	666	16 362	51 905	48 794	28 635	21 750	*3 111	*550	8	8
1761	Roofing, siding, and sheet metal work-----	163	1 599	39 016	122 807	117 346	72 526	49 961	5 461	1 674	5	3
1771	Concrete work -----	151	2 092	59 960	202 366	184 171	118 941	(D)	18 195	1 696	6	5
1781	Water well drilling -----	4	(S)	(S)	(S)	(D)	(S)	(S)	(D)	(D)	(S)	(S)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	14	251	7 439	26 131	23 569	15 956	(D)	2 562	223	(W)	(W)
1793	Glass and glazing work-----	53	786	20 230	71 501	70 227	36 748	37 737	*1 275	(D)	39	39
1794	Excavation work-----	32	187	7 339	46 885	45 957	46 285	(D)	928	223	14	6
1795	Wrecking and demolition work-----	(S)	73	2 063	6 744	6 302	6 711	(D)	442	(D)	21	27
1796	Installing building equipment, n.e.c.-----	14	166	7 904	20 837	20 240	13 365	(D)	597	131	(W)	(W)
1799	Special trade contractors, n.e.c.-----	141	1 421	29 669	100 436	92 174	66 059	29 118	8 262	1 707	8	8
6552	Land subdividers and developers, n.e.c.-----	39	192	5 282	17 281	11 559	8 981	3 035	5 722	(S)	21	26
	<b>SANTA CRUZ, CA PMSA</b>											
	Construction industries and land subdividers and developers-----	801	4 100	86 024	437 395	335 344	220 266	127 306	102 051	5 089	4	5
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses-----	260	872	13 787	70 202	54 606	32 855	22 914	15 596	342	10	11
1522	Other residential buildings-----	12	137	2 925	24 496	13 973	11 636	(D)	10 523	*173	26	13
1531	Operative builders-----	24	60	1 115	18 424	*8 242	*6 762	*1 740	10 182	*160	38	43
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	5	50	1 310	5 249	(D)	2 247	(D)	(D)	(D)	(W)	(D)
1542	Nonresidential buildings, n.e.c.-----	36	240	6 687	58 868	31 251	20 969	(D)	27 617	381	18	16
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction-----	11	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines-----	6	86	4 152	23 767	20 349	13 347	(D)	3 418	226	(W)	(W)
1629	Heavy construction, n.e.c.-----	*16	*38	*851	8 363	(D)	2 913	*1 046	(D)	69	50	(D)

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17	<b>SANTA CRUZ, CA PMSA—Con.</b>											
	<b>Construction industries and land subdividers and developers—Con.</b>											
	<b>Construction Industries—Con.</b>											
	<b>Special trade contractors:</b>											
	1711 Plumbing, heating, and air- conditioning -----	67	442	10 718	37 599	35 410	22 382	14 144	2 189	452	11	13
	1721 Painting and paper hanging -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1731 Electrical work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1742 Plastering, drywall, and insulation work -----	35	261	4 354	14 889	14 789	8 274	6 629	*100	*217	21	20
	1743 Terrazzo, tile, marble, and mosaic work -----	*8	46	996	3 745	(D)	2 320	1 666	(D)	72	12	(D)
	175 Carpentry and floor work:											
	1751 Carpentry -----	28	157	3 696	13 028	12 198	6 663	5 674	830	67	13	11
	1752 Floor laying and other floorwork -----	13	34	673	3 587	3 477	1 839	1 728	*110	156	13	18
	1761 Roofing, siding, and sheet metal work -----	37	255	4 067	14 766	14 473	7 692	6 814	*293	282	16	17
	1771 Concrete work -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1781 Water well drilling -----	5	84	(D)	4 443	(D)	3 562	2 508	(D)	(D)	(W)	(D)
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1793 Glass and glazing work -----	6	31	670	3 246	(D)	1 587	1 866	(D)	(D)	(W)	(D)
	1794 Excavation work -----	7	31	728	2 394	1 984	1 951	(D)	410	(D)	20	26
	1795 Wrecking and demolition work -----	-	-	-	-	-	-	-	-	-	-	-
	1796 Installing building equipment, n.e.c. -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1799 Special trade contractors, n.e.c. -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	6552 Land subdividers and developers, n.e.c. -----	*20	*64	*1 008	*7 348	(S)	*1 959	*343	*5 465	(D)	58	(S)
	<b>SANTA ROSA-PETALUMA, CA PMSA</b>											
	<b>Construction industries and land subdividers and developers -----</b>	1 507	8 706	204 950	1 003 826	755 950	472 525	310 720	247 877	22 800	2	3
	<b>Construction Industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
	152 General contractors, residential buildings:											
	1521 Single-family houses -----	397	1 190	19 883	119 557	84 365	56 504	31 575	35 192	4 703	8	8
	1522 Other residential buildings -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1531 Operative builders -----	50	427	11 360	140 659	80 476	56 576	29 222	60 183	*5 563	16	21
	154 General contractors, nonresidential buildings:											
	1541 Industrial buildings and warehouses -----	33	380	11 108	69 549	45 539	19 319	(D)	24 010	(D)	16	14
	1542 Nonresidential buildings, n.e.c. -----	108	753	17 211	119 138	54 821	37 177	18 309	64 317	898	11	8
	16 <b>Heavy construction other than building construction—contractors:</b>											
	1611 Highway and street construction -----	17	419	16 141	61 484	50 425	30 015	(D)	11 059	1 390	5	3
	162 Heavy construction, except highway: Bridge, tunnel, and elevated											
	1622 highway construction -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1623 Water, sewer, and utility lines -----	49	321	8 935	43 010	37 797	24 734	(D)	5 213	766	19	20
	1629 Heavy construction, n.e.c. -----	43	268	6 846	29 564	25 609	(D)	8 216	3 955	1 423	16	12



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>SANTA ROSA-PETALUMA, CA PMSA—Con.</b>											
	Construction industries and land subdividers and developers—Con. Construction industries—Con.											
15,16, 17 17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning -----	113	591	17 356	56 079	52 081	32 241	20 127	3 998	1 361	7	6
1721	Painting and paper hanging -----	90	307	4 186	14 135	13 748	9 466	4 336	388	306	10	10
1731	Electrical work -----	100	545	12 976	45 105	40 711	25 472	15 562	4 394	701	7	9
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	32	93	1 561	6 875	(D)	3 942	*2 750	(D)	*5	31	(D)
1742	Plastering, drywall, and insulation work -----	61	532	13 907	45 291	42 475	29 368	(D)	2 815	*683	8	8
1743	Terrazzo, tile, marble, and mosaic work -----	27	147	3 179	9 649	(D)	6 061	3 507	(D)	119	18	(D)
175	Carpentry and floor work:											
1751	Carpentry -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork -----	34	68	1 289	5 840	5 524	3 103	2 717	*316	44	10	22
1761	Roofing, siding, and sheet metal work -----	56	606	11 620	(D)	46 244	23 067	(D)	1 014	672	9	11
1771	Concrete work -----	80	452	10 458	39 027	36 468	21 806	14 679	2 559	329	12	12
1781	Water well drilling -----	8	94	(D)	8 845	(D)	6 245	2 711	(D)	171	(W)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1793	Glass and glazing work -----	*16	95	2 096	6 883	(D)	3 272	4 204	(D)	(D)	8	(D)
1794	Excavation work -----	32	226	6 822	28 931	25 170	14 604	10 597	3 761	2 127	27	16
1795	Wrecking and demolition work -----	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c. -----	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. -----	60	332	7 148	29 805	23 120	17 406	6 251	*6 685	*593	22	27
6552	Land subdividers and developers, n.e.c. -----	19	50	764	3 101	2 706	2 502	*341	*395	19	18	17
	<b>VALLEJO-FAIRFIELD-NAPA, CA PMSA</b>											
	Construction industries and land subdividers and developers -----	885	8 386	214 024	953 759	688 456	446 985	252 200	265 303	15 418	3	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings -----	12	*60	940	7 582	4 646	1 805	3 136	2 936	(S)	42	14
1531	Operative builders -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	*18	93	2 553	15 238	(D)	5 765	(D)	(D)	*103	25	(D)
1542	Nonresidential buildings, n.e.c. -----	39	544	19 507	233 165	60 574	35 256	(D)	172 591	397	7	4
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction -----	18	225	7 374	36 317	30 092	20 726	9 820	6 225	747	9	2
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction -----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines -----	25	1 011	26 164	115 326	101 062	72 558	30 024	14 264	4 538	1	2
1629	Heavy construction, n.e.c. -----	33	629	24 001	82 410	73 414	51 456	22 432	8 997	1 780	6	4

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>VALLEJO-FAIRFIELD-NAPA, CA PMSA—Con.</b>											
	<b>Construction Industries and land subdividers and developers—Con. Construction Industries—Con.</b>											
15,16, 17 17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning -----	83	743	19 156	62 236	59 171	37 353	22 140	3 065	956	8	6
1721	Painting and paper hanging -----	52	218	5 405	15 007	(D)	11 122	3 411	(D)	297	17	(D)
1731	Electrical work -----	82	786	19 123	67 355	63 941	36 676	29 223	3 413	957	9	6
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	*15	255	4 078	12 628	12 380	7 648	4 732	248	155	18	14
1742	Plastering, drywall, and insulation work -----	43	532	14 878	37 108	33 187	23 489	(D)	3 921	387	6	5
1743	Terrazzo, tile, marble, and mosaic work -----	14	106	3 263	8 404	8 302	5 721	(D)	102	54	1	1
175	Carpentry and floor work:											
1751	Carpentry -----	31	467	11 797	30 791	28 777	18 179	(D)	*2 014	50	12	8
1752	Floor laying and other floorwork -----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1761	Roofing, siding, and sheet metal work -----	43	359	5 863	(D)	25 464	15 491	(D)	*125	324	23	19
1771	Concrete work -----	59	496	11 935	37 740	36 987	22 322	14 702	753	1 769	9	6
1781	Water well drilling -----	4	22	466	2 293	(D)	1 405	855	(D)	(D)	(W)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	8	206	(D)	(D)	(D)	(D)	(D)	(D)	172	1	(D)
1793	Glass and glazing work -----	5	23	405	1 754	(D)	943	934	(D)	(D)	19	(D)
1794	Excavation work -----	19	116	3 047	8 788	8 348	8 144	(D)	440	493	16	17
1795	Wrecking and demolition work -----	-	-	-	-	-	-	-	-	-	-	-
1796	Installing building equipment, n.e.c. -----	3	10	(D)	831	(D)	(D)	(D)	(D)	(D)	(W)	(D)
1799	Special trade contractors, n.e.c. -----	41	281	6 264	20 501	18 794	12 521	6 483	*1 707	*852	32	31
6552	<b>Land subdividers and developers, n.e.c. -----</b>	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)





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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Hawaii. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 5,796 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$3.2 billion in total value of business done.

Most of the 5,796 construction establishments were small. Of the total, 3,905 were nonemployers, and over half of the employer establishments had less than 5 employees. The 859 construction establishments with 5 employees or more, while representing only 15 percent of all establishments, accounted for more than 84 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$3.0 billion on total dollar value of business done. Of this amount, \$2.8 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$891 million, leaving net value of construction work of \$2.0 billion. In addition, these establishments paid out \$838 million for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$1.3 billion. (See Introduction and appendixes for explanation of terms.)

There were 1,891 establishments with total employment averaging 21,706 during the year. Total payroll for 1987 was \$607 million. Total hours worked by construction workers during the year were 28.2 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 3,905 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$271 million. Most of these establishments, about 77 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987  
1982

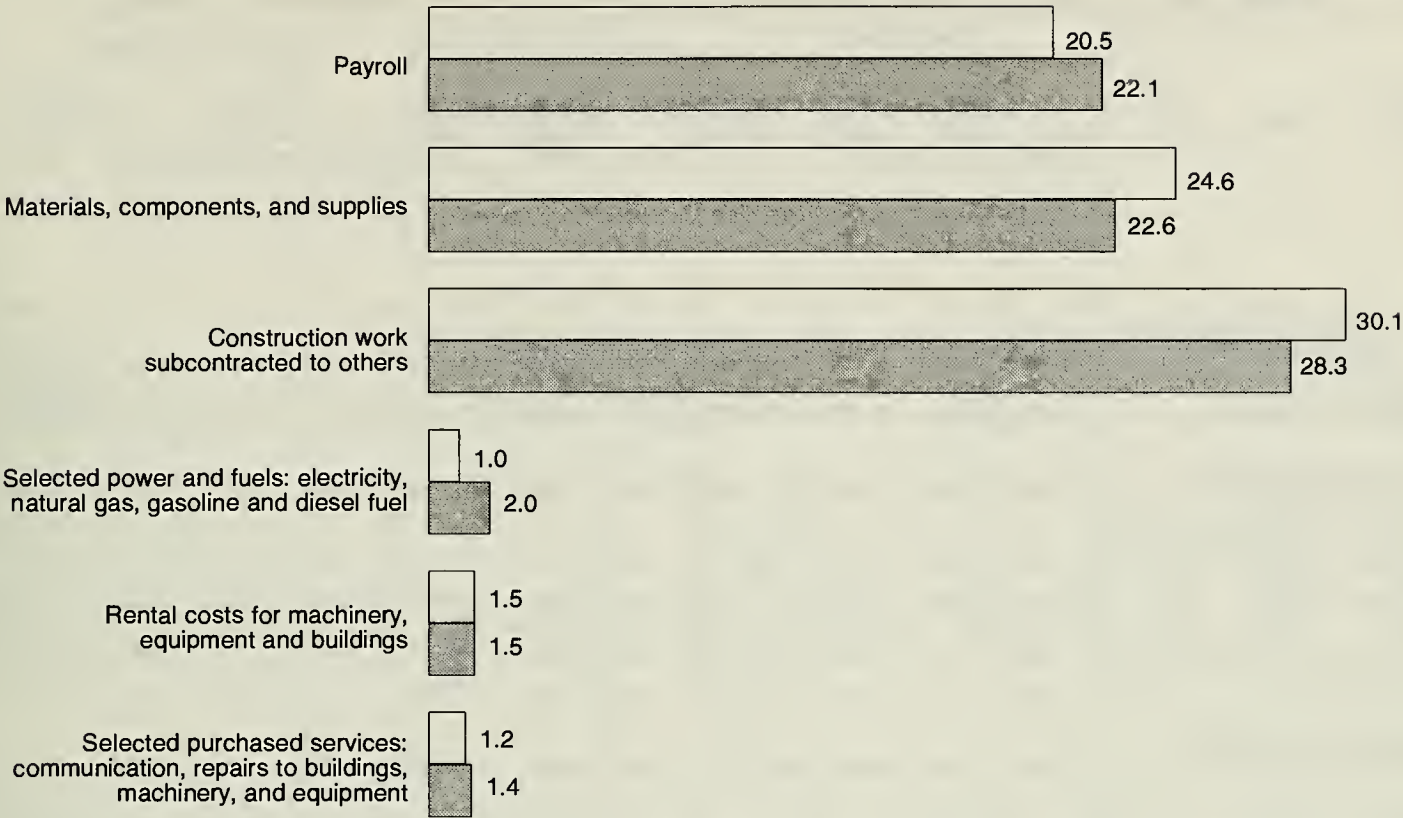
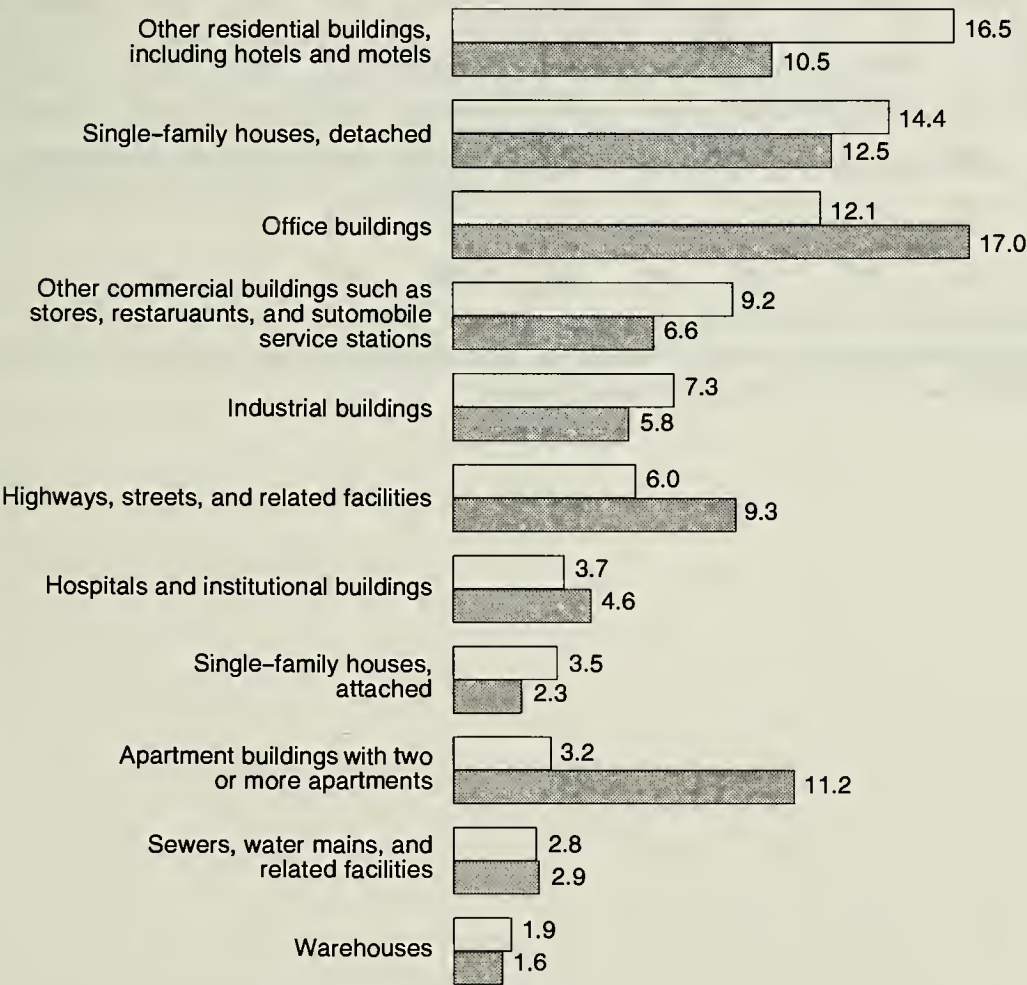


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987  
1982





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done		Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction Industries and land subdividers and developers .....	5 796	4 310	21 706	3 233 759	3 905	3 854	270 626	1 891	456	21 706	2 963 133	1	1
15, 16, 17	Construction Industries .....	5 605	4 147	21 385	3 104 309	3 761	3 693	189 281	1 844	454	21 385	2 915 028	1	1
15	Building construction—General contractors and operative builders .....	1 348	828	(D)	(D)	726	686	62 889	620	142	(D)	(D)	(D)	(D)
16	Heavy construction other than building construction— contractors .....	138	44	2 745	402 471	27	28	2 157	109	16	2 745	400 314	2	1
17	Special trade contractors .....	4 123	3 275	(D)	(D)	3 008	2 979	124 235	1 115	296	(D)	(D)	(D)	(D)
1711	Plumbing, heating, and air-conditioning ..	455	326	2 083	222 711	261	259	15 652	194	67	2 083	207 059	3	2
1731	Electrical work .....	483	321	1 949	215 809	262	255	14 481	221	66	1 949	201 328	4	3
6552	Land subdividers and developers, n.e.c.² .....	183	161	309	129 444	144	161	81 345	39	-	309	48 099	6	3
	1982													
	Construction Industries and land subdividers and developers .....	4 259	2 799	18 665	2 032 087	2 398	2 403	178 744	1 861	396	18 665	1 853 343	1	1
15, 16, 17	Construction Industries .....	4 092	2 645	18 340	1 894 873	2 289	2 259	75 784	1 803	386	18 340	1 818 889	1	1
15	Building construction—General contractors and operative builders .....	1 020	564	6 290	944 585	461	439	32 847	559	125	6 290	911 738	2	1
16	Heavy construction other than building construction— contractors .....	133	87	1 768	179 221	51	50	1 679	82	17	1 768	177 542	3	3
17	Special trade contractors .....	2 939	2 014	10 282	770 867	1 777	1 770	41 258	1 162	244	10 282	729 609	2	2
1711	Plumbing, heating, and air-conditioning ..	392	233	2 111	146 402	209	208	7 328	183	*25	2 111	139 074	5	3
1731	Electrical work .....	360	216	1 297	121 525	163	160	5 450	197	56	1 297	116 075	5	3
6552	Land subdividers and developers, n.e.c.² .....	162	154	323	137 412	109	144	102 960	53	10	323	34 452	8	4

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

<sup>1</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

<sup>2</sup>For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
<b>The State</b> .....	5 796	4 310	21 706	3 233 759	3 905	3 854	270 626	1 891	456	21 706	2 963 133	1	1
\$10,000,000 or more .....	48	4	7 046	(D)	1	2	(D)	47	2	7 046	1 470 724	(W)	(W)
\$5,000,000 to \$9,999,999 .....	50	4	2 376	(D)	1	2	(D)	49	2	2 376	335 143	(W)	(W)
\$2,500,000 to \$4,999,999 .....	134	19	3 331	2 291 868	9	9	45 903	125	*10	3 331	440 098	3	7
\$1,000,000 to \$2,499,999 .....	224	27	3 219	338 752	20	18	29 754	204	9	3 219	308 998	5	5
\$500,000 to \$999,999 .....	296	125	2 201	216 595	51	51	35 426	245	74	2 201	181 169	8	10
 \$250,000 to \$499,999 .....	408	191	1 552	147 933	92	91	31 059	316	100	1 552	116 874	10	10
\$100,000 to \$249,999 .....	920	573	1 572	149 411	374	365	58 293	546	208	1 572	91 118	10	8
\$50,000 to \$99,999 .....	(S)	(S)	(S)	(S)	429	430	30 962	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 .....	(S)	(S)	(S)	(S)	542	535	19 339	(S)	(S)	(S)	(S)	(S)	(S)
 Less than \$25,000 .....	(S)	(S)	(S)	(S)	2 386	2 351	19 890	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	841	820	13 765	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	533	532	3 872	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	412	409	1 508	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 .....	(NA)	(NA)	(NA)	(NA)	600	590	745	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
<b>The State</b> .....	4 259	2 799	18 665	2 032 087	2 398	2 403	178 744	1 861	396	18 665	1 853 343	1	1
\$10,000,000 or more .....	30	6	4 370	(D)	3	6	52 520	27	—	4 370	(D)	(W)	(D)
\$5,000,000 to \$9,999,999 .....	45	2	3 002	(D)	1	2	(D)	44	—	3 002	1 033 254	(W)	(W)
\$2,500,000 to \$4,999,999 .....	88	19	2 647	(D)	10	17	41 564	78	2	2 647	(D)	(W)	(D)
\$1,000,000 to \$2,499,999 .....	156	18	2 813	1 655 536	6	9	9 232	150	9	2 813	507 591	2	2
\$500,000 to \$999,999 .....	184	25	1 730	135 723	10	11	7 452	174	*14	1 730	128 271	8	8
 \$250,000 to \$499,999 .....	267	70	1 447	93 270	30	28	10 428	237	42	1 447	82 842	10	10
\$100,000 to \$249,999 .....	568	211	1 563	88 375	116	111	17 965	452	100	1 563	70 410	9	8
\$50,000 to \$99,999 .....	519	340	547	37 082	225	234	15 583	294	106	547	21 499	12	10
\$25,000 to \$49,999 .....	509	386	288	(D)	328	328	11 374	181	58	288	(D)	16	(D)
 Less than \$25,000 .....	1 892	1 722	258	22 101	1 669	1 657	12 626	223	65	258	9 475	12	11
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	533	533	8 542	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	386	379	2 573	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	407	405	1 168	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 .....	(NA)	(NA)	(NA)	(NA)	343	340	343	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.



**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
		A	B	C	D	E	F	G	H
	Construction industries and land subdividers and developers -----	1 891	21 706	16 582	606 858	435 959	28 192	2 849 780	1 958 320
15, 16, 17	Construction industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	398	1 910	1 477	38 456	27 446	2 157	273 734	174 414
1522	Other residential buildings -----	28	2 621	2 049	92 196	69 758	3 837	627 441	268 267
1531	Operative builders -----	*11	(D)	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	17	373	265	12 061	8 339	474	73 971	38 164
1542	Nonresidential buildings, n.e.c. -----	166	2 825	2 073	79 906	51 053	3 421	516 841	280 089
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	39	1 110	876	39 250	24 214	1 540	166 074	128 456
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines -----	24	626	517	17 940	14 486	971	76 797	64 902
1629	Heavy construction, n.e.c. -----	46	1 009	766	31 879	23 306	1 307	119 633	89 856
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	194	2 083	1 519	62 276	46 725	2 923	204 342	184 522
1721	Painting and paper hanging -----	149	1 295	1 028	31 045	23 285	1 573	83 159	79 230
1731	Electrical work -----	221	1 949	1 538	55 743	42 682	2 917	198 600	190 778
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	82	581	481	12 047	9 922	725	40 626	39 854
1742	Plastering, drywall, and insulation work -----	55	797	655	22 870	18 432	1 067	60 598	59 270
1743	Terrazzo, tile, marble, and mosaic work -----	29	311	262	7 119	5 748	425	27 363	25 752
175	Carpentry and floor work:								
1751	Carpentry -----	75	509	436	12 617	9 871	621	42 634	37 119
1752	Floor laying and other floor work -----	39	223	163	5 411	3 870	265	20 414	18 873
1761	Roofing, siding, and sheet metal work -----	86	997	774	20 441	14 146	1 130	78 178	74 268
1771	Concrete work -----	17	192	162	4 142	3 204	266	15 599	13 413
1781	Water well drilling -----	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	*17	458	382	14 435	12 306	653	46 755	45 449
1793	Glass and glazing work -----	35	236	150	6 054	4 063	265	22 510	21 931
1794	Excavation work -----	27	158	122	4 548	3 209	236	29 426	*21 460
1795	Wrecking and demolition work -----	*6	26	20	583	441	33	2 636	2 566
1796	Installing building equipment, n.e.c. -----	28	331	264	11 333	9 044	418	35 064	34 209
1799	Special trade contractors, n.e.c. -----	53	639	490	14 953	8 438	788	43 621	40 965
6552	Land subdividers and developers, n.e.c. -----	39	309	73	6 061	1 343	137	21 249	15 297

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
1 288 730	759 038	891 460	45 349	44 550	299 204	18 665	1 785 660	855 164	1	1	3	15, 16, 17
												15
114 574 129 294	63 758 (D)	99 319 359 173	2 619 2 868	2 866 4 439	21 556 17 893	1 661 1 925	131 839 296 046	63 087 90 411	6 2	8 1	21 4	152 1521 1522
(D)	(D)	(D)	(D)	(S)	(S)	(S)	(S)	(D)	(D)	(D)	(S)	1531
28 240 188 830	(D) 93 672	35 807 236 752	1 052 4 675	790 3 508	11 582 31 147	337 2 060	50 559 348 506	19 452 93 189	10 5	6 3	18 11	154 1541 1542
												16
83 007	(D)	37 618	7 489	11 002	49 474	983	107 855	51 037	2	1	1	1611
— 40 167 64 891	— 25 758 (D)	— 11 894 29 777	— 5 182 4 013	— (D) 5 905	— (D) 38 311	— 464 321	— 36 289 26 894	— 20 886 14 660	— 8 3	— 4 2	— (D) 4	162 1622 1623 1629
												17
126 024	61 214	19 820	3 839	1 478	16 512	2 111	135 656	84 487	3	2	20	1711
65 566	(D)	3 929	1 229	2 071	12 336	918	51 621	38 371	9	6	23	1721
117 010	76 496	7 821	3 279	2 938	18 602	1 297	112 311	71 723	4	3	11	1731
28 160 42 422 17 024	(D) 16 994 (D)	772 1 328 1 611	730 896 404	763 794 513	4 176 2 919 2 055	426 842 184	17 277 63 272 10 889	11 611 41 282 7 990	7 4 11	11 4 11	14 25 23	174 1741 1742 1743
22 003 10 516	15 340 10 159	5 515 *1 541	363 296	402 345	2 711 1 589	495 163	43 207 (D)	19 738 7 250	13 15	13 6	32 8	175 1751 1752
50 739	27 831	3 909	1 341	763	5 444	945	52 644	29 940	5	3	16	1761
8 476	(D)	2 186	317	387	(D)	611	44 094	24 969	9	11	13	1771
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1781
35 178 13 149 *19 336 2 413 24 533 29 302	(D) 12 344 2 437 (D) 10 994 16 443	1 306 579 (S) 70 *855 2 656	*625 565 *1 256 (D) 284 1 214	658 269 *1 398 *123 180 892	8 725 1 889 4 156 1 154 3 478 4 932	675 303 380 (D) 449 412	48 793 26 159 29 735 1 068 31 430 20 484	34 071 13 649 19 213 927 25 907 12 697	9 7 32 17 16 11	7 9 52 23 9 9	12 16 53 50 32 19	179 1791 1793 1794 1795 1796 1799
18 118	4 219	5 951	507	176	8 539	323	22 722	10 361	6	4	(W)	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	1 891	1 861	1 732	1 570	2	3	4	5
Proprietors and working partners .....	456	396	530	590	9	11	12	11
All employees** .....	21 706	18 665	20 792	25 012	1	1	2	2
Construction workers:								
March .....	16 319	14 789	15 808	19 405	2	2	2	2
May .....	16 637	14 317	16 516	19 357	1	2	2	2
August .....	17 091	12 977	16 798	20 527	1	2	2	2
November .....	16 281	12 915	13 955	20 568	1	2	3	2
Average .....	16 582	13 953	15 784	20 163	1	1	2	2
Other employees:								
March .....	4 861	4 711	5 032	4 949	2	2	4	2
May .....	5 151	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
August .....	5 283	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
November .....	5 202	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Average .....	5 124	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	6 743	5 716	(NA)	(NA)	2	2	(NA)	(NA)
April to June .....	7 156	5 716	(NA)	(NA)	2	2	(NA)	(NA)
July to September .....	7 335	5 217	(NA)	(NA)	2	2	(NA)	(NA)
October to December .....	6 957	5 167	(NA)	(NA)	2	2	(NA)	(NA)
Total hours worked .....	28 192	21 817	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees .....	606 858	409 679	323 402	282 602	1	1	2	2
Payroll, construction workers .....	435 959	297 885	240 359	222 909	1	1	2	2
Payroll, other employees .....	170 899	111 794	83 043	59 693	1	1	3	2
First quarter payroll, all employees .....	135 520	101 744	78 382	(NA)	1	1	2	(NA)
Employer costs for fringe benefits, all employees .....	185 337	93 091	101 245	(NA)	1	1	1	(NA)
Legally required expenditures .....	114 401	68 705	37 076	(NA)	1	1	2	(NA)
Voluntary expenditures .....	70 936	24 386	64 170	(NA)	2	1	1	(NA)
Dollar value of business done .....	2 963 133	1 853 343	1 435 157	1 085 515	1	1	1	2
Value of construction work <sup>1</sup> .....	2 849 780	1 785 660	1 329 495	1 014 587	1	1	1	2
Value of construction work subcontracted in from others .....	612 224	425 754	303 490	195 233	3	3	(W)	(W)
Land receipts <sup>2</sup> .....	23 905	18 509	(NA)	(NA)	4	2	(NA)	(NA)
Other business receipts .....	89 448	49 174	105 662	70 928	3	3	7	3
Net value of construction† .....	1 958 320	1 261 905	962 065	718 461	1	1	1	2
Value added†† .....	1 288 730	855 164	636 173	477 458	1	1	2	2
Selected costs .....	1 650 498	979 670	744 283	578 749	2	1	1	2
Materials, components, and supplies <sup>3</sup> .....	728 047	418 874	361 304	282 623	1	1	1	2
Construction work subcontracted to others .....	891 460	523 754	367 430	296 126	2	1	2	1
Selected power, fuels, and lubricants .....	30 990	37 041	15 549	(NA)	1	1	3	(NA)
Electricity .....	4 629	16 193	2 881	(NA)	3	1	5	(NA)
Natural gas .....	1 170	275	436	(NA)	2	7	13	(NA)
Gasoline and diesel fuel .....	23 187	18 558	10 177	(NA)	1	2	3	(NA)
On highway use .....	17 354	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Off highway use .....	5 832	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	2 003	2 013	2 055	(NA)	5	3	7	(NA)
Rental cost for machinery, equipment, and buildings .....	45 349	28 527	20 603	(NA)	3	3	1	(NA)
For machinery and equipment .....	25 169	17 135	13 861	15 826	3	4	1	1
For buildings .....	20 179	11 392	6 743	(NA)	3	4	2	(NA)
Selected purchased services .....	34 017	25 875	18 333	(NA)	2	3	3	(NA)
Communication services .....	7 431	5 072	3 855	(NA)	4	6	4	(NA)
Repairs to buildings and other structures .....	2 071	1 801	1 145	(NA)	15	2	8	(NA)
Repairs to machinery and equipment .....	24 514	19 001	13 333	(NA)	2	3	3	(NA)
Ownership of construction projects:								
Value of construction work .....	2 849 780	1 785 660	1 329 495	1 014 587	1	1	1	2
Government owned .....	816 362	499 385	439 607	294 121	2	2	1	2
Federal .....	295 159	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
State and local .....	521 203	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Privately owned .....	2 033 417	1 286 274	889 888	720 466	2	1	2	2

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	291 868	323 562	1	2
Capital expenditures, other than land -----	44 550	26 717	3	2
New -----	31 911	18 445	4	2
Used -----	12 638	8 272	3	4
Retirements and disposition of depreciable assets -----	37 214	14 377	2	22
End-of-year gross book value of depreciable assets -----	299 204	335 903	2	1
Depreciation charges during year -----	31 934	31 011	2	2
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	74 455	89 909	4	1
Capital expenditures, other than land -----	12 659	6 347	5	1
New buildings and other structures -----	9 100	3 899	7	1
Used buildings and other structures -----	3 559	2 448	4	3
Retirements and disposition of depreciable assets -----	4 440	2 543	14	2
End-of-year gross book value of depreciable assets -----	82 673	93 714	3	1
Depreciation charges during year -----	5 791	5 240	5	2
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	217 413	233 653	2	2
Capital expenditures, other than land -----	31 890	20 370	4	3
New machinery and equipment, including automobiles and trucks -----	22 810	14 545	5	3
New automobiles and trucks, intended primarily for highway use -----	10 834	5 181	7	9
Used machinery and equipment, including automobiles and trucks -----	9 079	5 824	4	5
Retirements and disposition of depreciable assets -----	32 774	11 833	1	27
End-of-year gross book value of depreciable assets -----	216 530	242 189	2	2
Depreciation charges during year -----	28 143	25 770	3	2

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
<b>All establishments:</b>		
Number .....	1 891	2
Value of construction work .....	2 849 780	1
<b>Establishments with inventories:</b>		
Number .....	871	5
Value of construction work .....	1 732 775	2
<b>Inventories<sup>1</sup>:</b>		
End of 1987, materials and supplies .....	32 023	14
End of 1986, materials and supplies .....	30 569	15
<b>Establishments with no inventories:</b>		
Number .....	659	7
Value of construction work .....	679 761	4
<b>Establishments not reporting:</b>		
Number .....	361	11
Value of construction work .....	437 244	3

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments -----	1 891	1 032	384	231	172	46	21	1	1	1
All employees** -----	21 706	2 102	2 527	3 098	5 069	3 109	3 159	2 639	(D)	(D)
Payroll, all employees -----	606 858	36 014	50 593	73 880	143 475	101 716	109 073	92 106	(D)	(D)
Construction worker hours (thousands) -----	28 192	2 318	3 014	3 903	6 406	4 280	4 421	3 848	(D)	(D)
Dollar value business done -----	2 963 133	245 173	253 736	302 914	643 578	427 058	1 090 673	(D)	(D)	(D)
Value of construction work <sup>1</sup> -----	2 849 780	239 493	246 876	293 530	614 757	416 506	1 038 616	(D)	(D)	(D)
Net value of construction work <sup>†</sup> -----	1 958 320	180 023	182 185	240 685	771 140	(D)	329 608	254 678	(D)	(D)
Value added <sup>††</sup> -----	1 288 730	128 108	121 071	163 523	319 449	442 116	(D)	114 461	(D)	(D)
Cost of materials, components, supplies, and fuels -----	759 038	54 969	67 227	84 140	155 972	107 587	289 141	(D)	(D)	(D)
Cost of construction work subcontracted to others -----	891 460	59 470	64 691	52 844	260 123	(D)	454 330	(D)	(D)	(D)
Rental cost for machinery, equipment, and buildings -----	45 349	3 709	4 606	6 237	8 809	4 668	14 722	2 595	(D)	(D)
Capital expenditures, other than land -----	44 550	6 493	2 848	4 952	9 700	4 153	16 403	(D)	(D)	(D)
End-of-year gross book value of depreciable assets -----	299 204	29 283	20 384	42 990	76 877	50 559	79 110	(D)	(D)	(D)
<b>1982</b>										
All employees** -----	18 665	2 261	2 079	2 756	3 789	3 350	4 430	(D)	-	(D)
Value of construction work <sup>1</sup> -----	1 785 660	119 863	148 518	214 167	404 359	397 638	501 114	(D)	-	(D)
Value added <sup>††</sup> -----	855 164	60 756	88 561	114 248	223 544	158 719	209 335	(D)	-	(D)
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** -----	1	6	9	6	3	(W)	(W)	(W)	(D)	(D)
Net value of construction work <sup>†</sup> -----	1	8	9	5	2	(D)	(W)	(W)	(D)	(D)
Capital expenditures, other than land -----	3	19	15	9	4	(W)	(W)	(D)	(D)	(D)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments .....	1 891	(S)	(S)	(S)	546	316	245	204	125	49	47
All employees** .....	21 706	(S)	(S)	(S)	1 572	1 552	2 201	3 219	3 331	2 376	7 046
Payroll, all employees .....	606 858	(S)	(S)	(S)	23 060	28 688	45 700	80 668	100 510	76 803	247 203
Construction worker hours (thousands) .....	28 192	(S)	(S)	(S)	1 939	1 829	2 565	3 899	4 597	3 029	9 900
Dollar value of business done .....	2 963 133	(S)	(S)	(S)	91 118	116 874	181 169	308 998	440 098	335 143	1 470 724
Value of construction work <sup>1</sup> .....	2 849 780	(S)	(S)	(S)	89 649	113 118	175 604	299 807	433 195	323 868	1 395 878
Net value of construction work† .....	1 958 320	(S)	(S)	(S)	80 236	96 515	149 339	251 732	<u>582 511</u>	(D)	780 715
Value added†† .....	1 288 730	(S)	(S)	(S)	53 912	64 457	97 612	173 039	237 105	164 444	486 429
Cost of materials, components, supplies, and fuels .....	759 038	(S)	(S)	(S)	27 599	34 376	57 291	85 207	100 890	<u>447 988</u>	(D)
Cost of construction work subcontracted to others .....	891 460	(S)	(S)	(S)	9 413	16 602	26 265	48 075	<u>174 551</u>	(D)	615 163
Rental cost for machinery, equipment, and buildings .....	45 349	(S)	(S)	(S)	1 963	2 785	3 507	6 201	6 478	3 080	21 169
Capital expenditures, other than land .....	44 550	(S)	(S)	(S)	3 651	2 475	3 008	5 428	7 027	4 353	18 371
End-of-year gross book value of depreciable assets .....	299 204	(S)	(S)	(S)	14 778	16 918	16 366	42 165	50 621	39 183	115 404
<b>1982</b>											
All employees** .....	18 665	258	288	547	1 563	1 447	1 730	2 813	2 647	3 002	4 370
Value of construction work <sup>1</sup> .....	1 785 660	2 404	6 824	20 659	68 494	80 512	124 161	224 831	262 048	310 977	684 749
Value added†† .....	855 164	1 380	4 133	10 324	38 742	47 690	73 611	127 866	137 829	157 178	256 408
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** .....	1	(S)	(S)	(S)	10	10	8	5	3	(W)	(W)
Net value of construction work† .....	1	(S)	(S)	(S)	8	10	9	5	5	(D)	(W)
Capital expenditures, other than land .....	3	(S)	(S)	(S)	20	23	18	12	9	4	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair				
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	2 849 780	1 884 614	619 874	244 023	1	2	2	2
<b>Building construction</b> .....	2 271 607	1 534 113	517 454	188 891	2	2	3	3
Single-family houses .....	511 574	386 183	83 677	41 713	5	7	6	8
Single-family houses, detached .....	411 668	307 567	72 439	31 661	6	8	7	9
Single-family houses, attached .....	99 906	78 616	11 238	10 052	12	15	15	12
Apartment buildings with two or more apartments .....	92 184	60 131	12 124	19 928	3	2	6	13
Other residential buildings, including hotels and motels .....	470 519	341 787	102 463	26 268	1	1	1	4
Hotels and motels .....	448 486	331 314	97 022	20 148	1	1	1	5
Other residential buildings, excluding hotels and motels .....	22 033	10 473	5 441	6 120	10	17	13	6
Office buildings .....	345 845	236 993	81 914	26 937	3	3	6	4
Other commercial buildings such as stores, restaurants, and automobile service stations .....	262 850	139 360	99 158	24 330	3	5	6	9
Industrial buildings and warehouses .....	261 403	202 957	44 087	14 358	3	3	9	6
Industrial buildings .....	208 418	159 894	37 526	10 998	3	3	10	7
Warehouses .....	52 985	43 063	6 561	3 360	7	8	9	9
Religious buildings .....	11 213	4 840	5 190	1 182	11	19	16	18
Educational buildings .....	96 169	54 072	22 501	19 595	3	4	3	10
Hospitals and institutional buildings .....	106 707	50 174	48 236	8 295	3	4	3	15
Amusement, social, and recreational buildings .....	22 720	15 714	3 524	3 481	2	2	11	6
Other nonresidential buildings .....	59 275	41 902	14 580	2 804	11	2	15	14
Land development for buildings .....	31 148	(NA)	(NA)	(NA)	19	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	508 054	350 500	102 420	55 132	1	1	2	5
Highways, streets, and related facilities .....	171 276	123 837	29 317	18 122	1	1	2	3
Recreational facilities such as athletic fields, golf courses, and outdoor tennis courts .....	12 128	7 281	(D)	(D)	(W)	(W)	(D)	(D)
Bridges, tunnels, and elevated highways .....	9 430	8 637	*440	352	10	6	68	37
Marine construction .....	14 791	14 151	538	*101	7	6	29	71
Sewers, water mains, and related facilities .....	81 043	62 416	13 314	5 312	3	1	17	9
Sewers, sewer lines, and related facilities .....	40 368	29 595	7 583	3 189	4	2	18	15
Water mains and related facilities .....	40 675	32 821	5 731	2 123	2	1	15	1
Pipeline, other than sewer or water lines .....	10 972	9 527	(D)	(D)	9	10	(D)	(D)
Blast furnaces, petroleum refineries, and chemical complexes .....	7 644	1 142	*132	6 369	17	23	74	16
Power plants .....	4 964	1 837	1 050	2 077	5	1	2	12
Sewage treatment and water treatment plants .....	22 834	20 185	*1 046	1 603	3	(W)	44	21
Earthmoving, nonbuilding .....	32 223	24 160	3 526	4 536	1	1	(W)	(W)
Other nonbuilding construction .....	140 749	77 327	50 325	13 102	3	4	1	33
<b>Construction work, n.s.k.</b> .....	70 118	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	1 785 660	1 518 921	(NA)	266 738	1	1	(NA)	3
<b>Building construction</b> .....	1 398 867	1 205 103	(NA)	193 764	1	1	(NA)	2
Single-family houses .....	264 946	214 585	(NA)	50 361	4	4	(NA)	6
Single-family houses, detached .....	223 310	182 790	(NA)	40 520	4	4	(NA)	8
Single-family houses, attached .....	41 636	31 795	(NA)	9 841	5	6	(NA)	7
Apartment buildings with two or more apartments .....	200 774	183 791	(NA)	16 983	2	2	(NA)	8
Other residential buildings, including hotels and motels .....	187 748	165 084	(NA)	22 664	1	1	(NA)	4
Office buildings .....	302 599	273 855	(NA)	28 744	1	2	(NA)	2
Other commercial buildings such as stores, restaurants, and automobile service stations .....	116 938	94 833	(NA)	22 104	3	2	(NA)	8
Industrial buildings and warehouses .....	132 244	110 564	(NA)	21 679	2	2	(NA)	5
Industrial buildings .....	103 767	87 092	(NA)	16 675	2	2	(NA)	6
Warehouses .....	28 476	23 472	(NA)	5 003	5	6	(NA)	9
Religious buildings .....	10 384	9 090	(NA)	1 294	5	6	(NA)	8
Educational buildings .....	62 876	53 568	(NA)	9 307	2	3	(NA)	5
Hospitals and institutional buildings .....	81 762	69 428	(NA)	12 333	1	1	(NA)	1
Amusement, social, and recreational buildings .....	14 612	12 115	(NA)	2 496	2	3	(NA)	3
Other nonresidential buildings .....	23 979	18 184	(NA)	5 795	11	8	(NA)	18
<b>Nonbuilding construction</b> .....	306 727	249 072	(NA)	57 655	1	2	(NA)	2
Highways, streets, and related facilities .....	166 789	128 348	(NA)	38 440	1	2	(NA)	2
Power and communication transmission lines, towers, and related facilities .....	11 872	11 251	(NA)	621	1	1	(NA)	1
Sewers, water mains, and related facilities .....	51 108	41 480	(NA)	9 627	5	6	(NA)	7
Sewers, sewer lines, and related facilities .....	30 188	24 470	(NA)	5 717	9	11	(NA)	2
Water mains and related facilities .....	20 919	17 009	(NA)	3 909	3	(W)	(NA)	18
Pipeline, other than sewer or water lines .....	7 547	7 076	(NA)	471	(W)	(W)	(NA)	(W)
Sewage treatment and water treatment plants .....	30 254	29 144	(NA)	1 109	(W)	(W)	(NA)	3
Sewage treatment plants .....	28 680	27 714	(NA)	965	(W)	(W)	(NA)	(W)
Water treatment plants .....	1 574	1 430	(NA)	144	2	(W)	(NA)	22
Other nonbuilding construction .....	39 152	31 767	(NA)	7 379	4	4	(NA)	12
<b>Construction work, n.s.k.</b> .....	80 064	64 745	(NA)	15 318	7	7	(NA)	9

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction industries and land subdividers and developers -----</b>	<b>1 891</b>	<b>16 582</b>	<b>28 192</b>	<b>16 319</b>	<b>6 743</b>	<b>16 637</b>	<b>7 156</b>
<b>15, 16, 17</b>	<b>Construction industries:</b>							
<b>15</b>	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	398	1 477	2 157	1 431	526	1 430	539
1522	Other residential buildings -----	28	2 049	3 837	2 185	1 021	2 231	1 054
1531	Operative builders -----	*11	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses-----	17	265	474	267	115	261	115
1542	Nonresidential buildings, n.e.c. -----	166	2 073	3 421	1 909	766	2 086	888
<b>16</b>	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	39	876	1 540	789	340	879	393
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines -----	24	517	971	459	224	479	224
1629	Heavy construction, n.e.c. -----	46	766	1 307	712	296	795	334
<b>17</b>	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	194	1 519	2 923	1 604	740	1 527	744
1721	Painting and paper hanging -----	149	1 028	1 573	904	320	974	391
1731	Electrical work -----	221	1 538	2 917	1 667	776	1 495	694
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	82	481	725	455	171	471	193
1742	Plastering, drywall, and insulation work ..	55	655	1 067	624	233	705	273
1743	Terrazzo, tile, marble, and mosaic work ..	29	262	425	222	79	232	101
175	Carpentry and floor work:							
1751	Carpentry -----	75	436	621	464	118	446	138
1752	Floor laying and other floor work -----	39	163	265	175	67	158	64
1761	Roofing, siding, and sheet metal work -----	86	774	1 130	733	247	816	330
1771	Concrete work -----	17	162	266	171	70	146	61
1781	Water well drilling -----	2	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	*17	382	653	448	197	374	157
1793	Glass and glazing work -----	35	150	265	146	58	143	62
1794	Excavation work -----	27	122	236	90	*49	117	50
1795	Wrecking and demolition work -----	*6	20	33	18	6	17	8
1796	Installing building equipment, n.e.c. -----	28	264	418	250	94	279	108
1799	Special trade contractors, n.e.c. -----	53	490	788	475	176	464	183
6552	<b>Land subdividers and developers, n.e.c. --</b>	<b>39</b>	<b>73</b>	<b>137</b>	<b>75</b>	<b>32</b>	<b>67</b>	<b>31</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
17 091	7 335	16 281	6 957	1	1	2	2	1	2	1	2	1	2	15, 16, 17
														15
1 606	572	1 441	519	7	9	7	14	7	10	8	9	8	9	152
2 038	957	1 742	803	2	3	2	3	2	3	1	3	2	4	1521
														1522
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1531
														154
266	121	267	121	10	14	10	13	10	15	12	18	9	11	1541
2 178	893	2 117	873	5	6	4	6	6	6	6	7	6	7	1542
														16
941	425	898	382	2	3	1	2	2	3	3	3	3	4	1611
														162
-	-	-	-	-	-	-	-	-	-	-	-	-	-	1622
555	264	575	258	9	9	8	10	8	9	11	10	10	9	1623
784	326	773	349	3	3	2	2	5	2	3	3	5	7	1629
														17
1 497	731	1 449	707	3	6	3	5	3	5	3	6	5	7	1711
1 135	438	1 099	421	8	9	8	9	7	8	8	9	10	12	1721
1 512	747	1 477	698	4	6	10	12	3	5	4	6	4	6	1731
														174
														1741
499	179	498	182	7	9	8	12	6	8	9	9	9	10	1742
657	281	633	279	5	6	5	4	6	10	5	6	6	8	1743
300	123	293	121	11	12	11	12	14	14	13	11	9	12	175
415	182	417	182	13	10	24	9	19	7	8	9	12	16	1751
154	63	165	69	13	6	12	6	14	7	14	6	14	8	1752
781	274	765	278	6	8	9	13	14	21	6	7	6	5	1761
150	66	181	67	10	16	7	14	12	18	12	18	8	16	1771
(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1781
														179
372	151	335	146	6	7	6	7	7	8	6	7	7	7	1791
153	72	160	72	7	8	7	9	7	10	6	8	7	7	1793
158	*73	126	62	30	38	33	42	26	33	35	42	27	36	1794
28	10	20	8	18	17	28	21	15	21	18	18	13	10	1795
272	111	257	103	17	8	18	7	17	9	18	9	16	9	1796
531	222	488	206	11	16	11	16	10	16	10	17	11	18	1799
75	37	77	35	8	14	6	10	7	12	10	20	13	19	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction Industries and land subdividers and developers .....</b>	<b>11.5</b>	<b>28.0</b>	<b>1 700.2</b>	<b>171.9</b>	<b>.213</b>	<b>.266</b>	<b>.313</b>	<b>.016</b>
15, 16, 17	<b>Construction Industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses .....	4.8	20.1	1 460.4	185.3	.140	.233	.363	.010
1522	Other residential buildings .....	93.6	35.2	1 872.6	306.2	.147	(D)	.572	.005
1531	Operative builders .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses .....	21.9	32.3	1 788.7	279.1	.163	(D)	.484	.014
1542	Nonresidential buildings, n.e.c. ....	17.0	28.3	1 650.3	249.3	.155	.181	.458	.009
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction .....	28.5	35.4	1 758.0	189.6	.236	(D)	.227	.045
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction .....	—	—	—	—	—	—	—	—
1623	Water, sewer, and utility lines .....	26.1	28.7	1 878.1	148.5	.234	.335	.155	.067
1629	Heavy construction, n.e.c. ....	21.9	31.6	1 706.3	156.2	.266	(D)	.249	.034
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning .....	10.7	29.9	1 924.3	134.5	.305	.300	.097	.019
1721	Painting and paper hanging .....	8.7	24.0	1 530.2	80.9	.373	(D)	.047	.015
1731	Electrical work .....	8.8	28.6	1 896.6	129.1	.281	.385	.039	.017
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework .....	7.1	20.7	1 507.3	84.5	.297	(D)	.019	.018
1742	Plastering, drywall, and insulation work .....	14.5	28.7	1 629.0	92.5	.377	.280	.022	.015
1743	Terrazzo, tile, marble, and mosaic work .....	10.7	22.9	1 622.1	104.4	.260	(D)	.059	.015
175	Carpentry and floor work:								
1751	Carpentry .....	6.8	24.8	1 424.3	97.8	.296	.360	.129	.009
1752	Floor laying and other floor work .....	5.7	24.3	1 625.8	125.2	.265	.498	*.075	.014
1761	Roofing, siding, and sheet metal work .....	11.6	20.5	1 459.9	101.0	.261	.356	.050	.017
1771	Concrete work .....	11.3	21.6	1 642.0	96.3	.266	(D)	.140	.020
1781	Water well drilling .....	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:								
1791	Structural steel erection .....	*26.9	31.5	1 709.4	122.4	.309	(D)	.028	*.013
1793	Glass and glazing work .....	6.7	25.7	1 766.7	150.1	.269	.548	.026	.025
1794	Excavation work .....	5.9	28.8	1 934.4	241.2	.155	.083	(S)	*.043
1795	Wrecking and demolition work .....	*4.3	22.4	1 650.0	131.8	.221	(D)	.027	(D)
1796	Installing building equipment, n.e.c. ....	11.8	34.2	1 583.3	132.8	.323	.314	*.024	.008
1799	Special trade contractors, n.e.c. ....	12.1	23.4	1 608.2	89.0	.343	.377	.061	.028
6552	<b>Land subdividers and developers, n.e.c. ....</b>	<b>7.9</b>	<b>19.6</b>	<b>1 876.7</b>	<b>291.1</b>	<b>.285</b>	<b>.199</b>	<b>.280</b>	<b>.024</b>

Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>HONOLULU, HI MSA</b>											
	<b>Construction industries and land subdividers and developers .....</b>	<b>1 284</b>	<b>17 851</b>	<b>525 156</b>	<b>2 441 626</b>	<b>1 647 931</b>	<b>1 082 858</b>	<b>635 334</b>	<b>793 694</b>	<b>36 148</b>	<b>1</b>	<b>1</b>
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses .....	211	1 253	27 742	184 725	(D)	80 752	(D)	67 285	1 740	8	(D)
1522	Other residential buildings .....	*18	2 354	86 000	596 663	247 681	115 106	(D)	348 982	(D)	2	1
1531	Operative builders .....	*10	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	13	327	10 466	63 339	(D)	(D)	(D)	(D)	(D)	12	(D)
1542	Nonresidential buildings, n.e.c. ....	131	2 224	65 234	430 328	228 573	152 336	77 243	201 755	2 515	5	3
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction .....	19	880	32 858	140 986	(D)	69 316	(D)	(D)	10 151	3	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines .....	18	566	16 435	70 264	59 597	36 986	(D)	10 667	(D)	9	5
1629	Heavy construction, n.e.c. ....	21	869	28 840	106 139	77 712	57 206	(D)	28 428	4 859	3	2
17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning .....	141	1 791	55 458	176 992	158 484	110 318	50 251	18 508	1 045	4	2
1721	Painting and paper hanging .....	110	1 097	27 874	74 755	70 894	58 897	(D)	3 860	(D)	8	6
1731	Electrical work .....	153	1 609	47 109	163 001	156 836	96 023	63 541	6 164	2 282	5	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	59	479	10 696	35 124	(D)	24 795	(D)	(D)	(D)	8	(D)
1742	Plastering, drywall, and insulation work .....	42	691	20 942	54 446	53 442	38 426	15 164	1 004	644	4	4
1743	Terrazzo, tile, marble, and mosaic work .....	25	285	6 517	25 559	(D)	(D)	(D)	(D)	(D)	12	(D)
175	Carpentry and floor work:											
1751	Carpentry .....	51	458	11 709	38 230	33 794	19 823	(D)	4 436	234	15	14
1752	Floor laying and other floorwork .....	27	198	5 179	19 120	(D)	9 441	9 946	(D)	214	17	(D)
1761	Roofing, siding, and sheet metal work .....	70	745	15 874	60 421	(D)	37 816	20 038	(D)	446	7	(D)
1771	Concrete work .....	13	143	3 592	13 235	(D)	7 408	(D)	(D)	285	12	(D)
1781	Water well drilling .....	2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	*17	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1793	Glass and glazing work .....	18	164	4 323	15 287	(D)	9 588	8 738	(D)	224	3	(D)
1794	Excavation work .....	*10	*74	*2 482	*23 656	*16 026	*15 294	*769	(S)	*849	61	70
1795	Wrecking and demolition work .....	*6	(D)	(D)	(D)	2 566	(D)	(D)	70	(D)	(D)	23
1796	Installing building equipment, n.e.c. ....	25	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1799	Special trade contractors, n.e.c. ....	47	586	13 931	40 303	37 771	26 933	14 871	2 532	747	12	10
6552	<b>Land subdividers and developers, n.e.c. ....</b>	<b>28</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>	<b>(D)</b>





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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Oregon. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 21,898 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$4.6 billion in total value of business done.

Most of the 21,898 construction establishments were small. Of the total, 15,429 were nonemployers, and over half of the employer establishments had less than 5 employees. The 2,115 construction establishments with 5 employees or more, while representing only 10 percent of all establishments, accounted for more than 66 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$3.8 billion on total dollar value of business done. Of this amount, \$3.7 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$916 million, leaving net value of construction work of \$2.8 billion. In addition, these establishments paid out \$1.3 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$1.7 billion. (See Introduction and appendixes for explanation of terms.)

There were 6,469 establishments with total employment averaging 38,504 during the year. Total payroll for 1987 was \$786 million. Total hours worked by construction workers during the year were 44.6 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the introduction.


## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 15,429 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$764 million. Most of these establishments, about 68 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.



Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987   
1982 

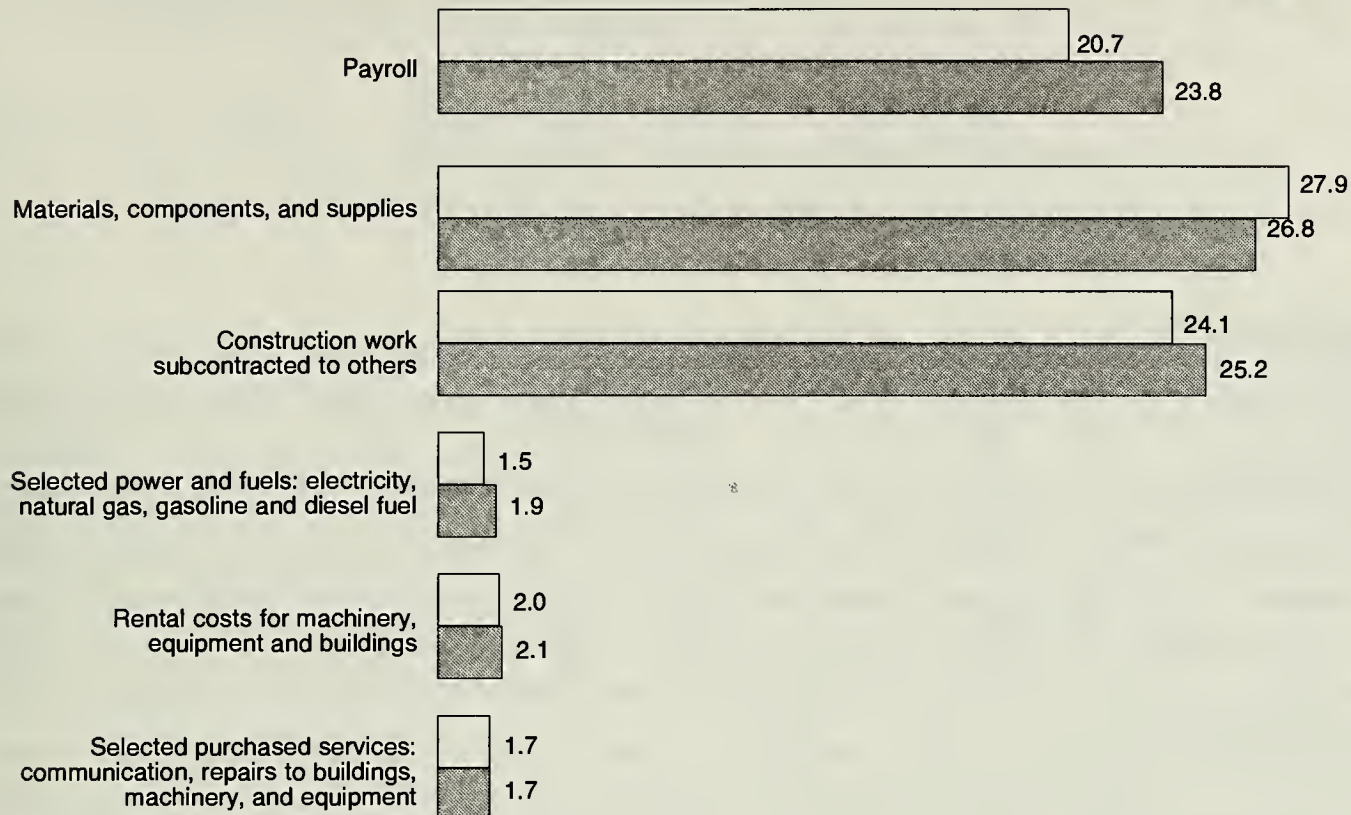


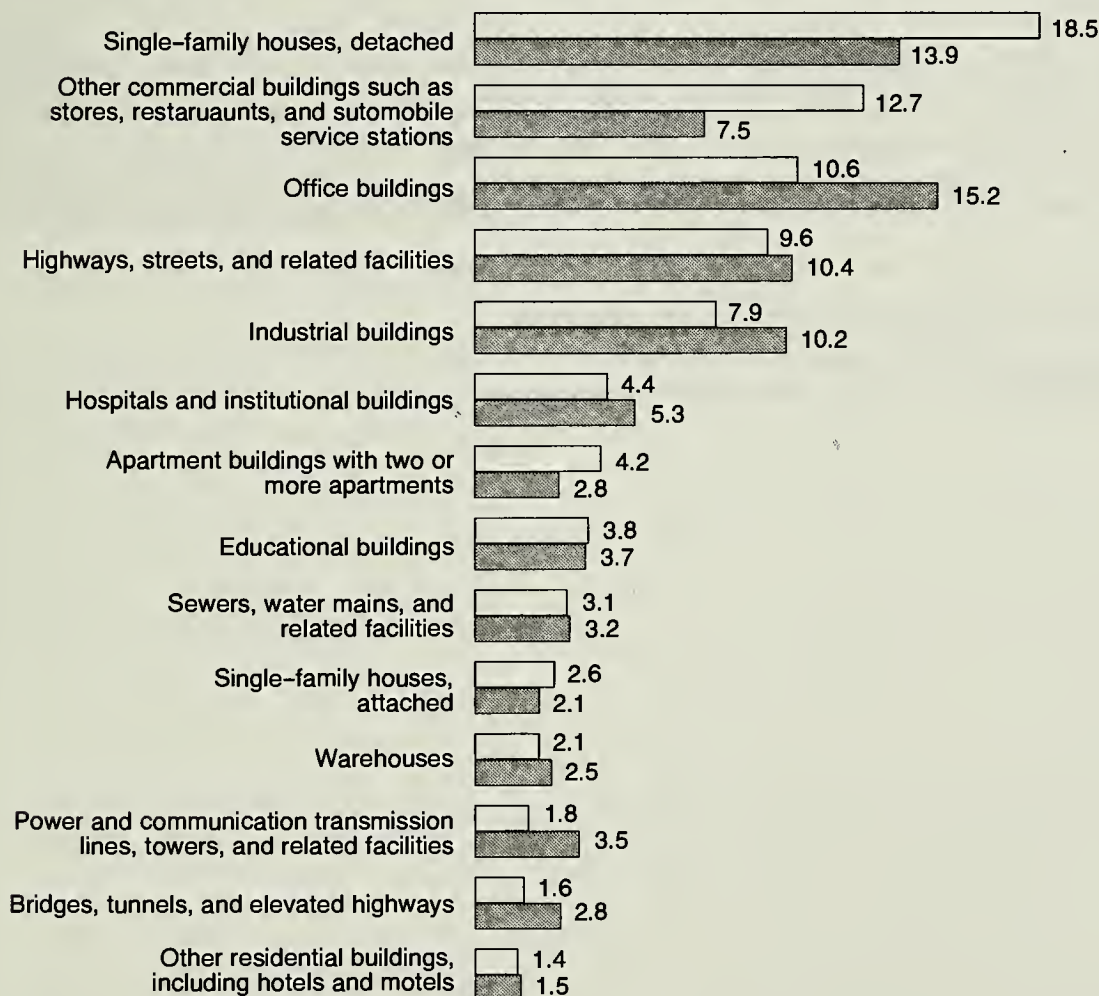


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987   
1982 





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done		Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
	1987													
	Construction Industries and land subdividers and developers .....	21 898	16 901	38 504	4 564 219	15 429	15 285	764 384	6 469	1 616	38 504	3 799 835	1	1
15, 16, 17	Construction Industries .....	21 470	16 541	38 285	4 430 332	15 095	14 955	676 866	6 375	1 586	38 285	3 753 466	1	1
15	Building construction—General contractors and operative builders ....	6 274	4 480	9 189	1 702 532	4 284	4 082	293 914	1 990	398	9 189	1 408 618	4	3
16	Heavy construction other than building construction— contractors .....	869	449	5 625	753 989	338	332	55 581	531	117	5 625	698 408	3	3
17	Special trade contractors .....	14 327	11 612	23 471	1 973 811	10 473	10 541	327 371	3 854	1 071	23 471	1 646 440	2	2
1711	Plumbing, heating, and air-conditioning ..	1 233	799	4 632	413 885	601	604	31 059	632	195	4 632	382 826	3	3
1731	Electrical work .....	1 108	718	4 214	336 013	594	594	20 640	514	124	4 214	315 373	5	3
6552	Land subdividers and developers, n.e.c.² .....	417	355	206	133 876	334	330	87 518	83	25	206	46 358	29	17
	1982													
	Construction Industries and land subdividers and developers .....	20 920	17 227	35 551	3 268 321	14 845	15 055	440 632	6 075	2 172	35 551	2 827 689	2	1
15, 16, 17	Construction Industries .....	20 580	16 972	35 349	3 230 573	14 597	14 811	418 026	5 983	2 161	35 349	2 812 547	2	1
15	Building construction—General contractors and operative builders ....	6 358	5 119	8 997	1 257 280	4 410	4 449	177 153	1 948	670	8 997	1 080 127	3	2
16	Heavy construction other than building construction— contractors .....	1 306	934	6 078	563 024	760	767	36 208	546	167	6 078	526 816	3	3
17	Special trade contractors .....	12 916	10 919	20 274	1 410 269	9 427	9 595	204 665	3 489	1 324	20 274	1 205 604	2	2
1711	Plumbing, heating, and air-conditioning ..	1 256	806	3 794	292 039	620	625	27 595	636	181	3 794	264 444	4	2
1731	Electrical work .....	952	607	3 167	241 509	481	487	14 510	471	120	3 167	226 999	4	3
6552	Land subdividers and developers, n.e.c.² .....	334	253	196	37 741	248	244	22 606	86	*9	196	15 135	15	25

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

¹For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

²For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column—	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
<b>The State</b> .....	<b>21 898</b>	<b>16 901</b>	<b>38 504</b>	<b>4 584 219</b>	<b>15 429</b>	<b>15 285</b>	<b>764 384</b>	<b>6 469</b>	<b>1 616</b>	<b>38 504</b>	<b>3 799 835</b>	<b>1</b>	<b>1</b>
\$10,000,000 or more .....	39	6	3 290	772 991	3	6	48 285	36	-	3 290	724 706	(W)	(W)
\$5,000,000 to \$9,999,999 .....	82	4	3 961	(D)	2	2	(D)	80	2	3 961	562 177	(W)	(W)
\$2,500,000 to \$4,999,999 .....	151	20	3 991	1 089 357	4	1	28 231	147	*19	3 991	498 949	4	7
\$1,000,000 to \$2,499,999 .....	570	96	7 299	854 262	47	40	70 645	523	56	7 299	783 617	3	5
\$500,000 to \$999,999 .....	710	193	5 096	506 258	123	111	83 908	587	82	5 096	422 350	7	7
\$250,000 to \$499,999 .....	1 277	436	5 510	457 724	271	243	94 071	1 006	193	5 510	363 653	7	6
\$100,000 to \$249,999 .....	3 132	1 741	6 261	491 002	1 033	1 038	153 264	2 099	703	6 261	337 738	5	4
\$50,000 to \$99,999 .....	(S)	(S)	(S)	(S)	1 709	1 707	119 814	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 .....	(S)	(S)	(S)	(S)	2 460	2 467	86 957	(S)	(S)	(S)	(S)	(S)	(S)
Less than \$25,000 .....	(S)	(S)	(S)	(S)	9 777	9 670	79 210	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	3 312	3 274	54 638	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	2 075	2 054	15 168	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	1 652	1 639	6 048	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 .....	(NA)	(NA)	(NA)	(NA)	2 738	2 703	3 357	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
<b>The State</b> .....	<b>20 920</b>	<b>17 227</b>	<b>35 551</b>	<b>3 268 321</b>	<b>14 845</b>	<b>15 055</b>	<b>440 632</b>	<b>6 075</b>	<b>2 172</b>	<b>35 551</b>	<b>2 827 689</b>	<b>2</b>	<b>1</b>
\$10,000,000 or more .....	31	-	5 150	(D)	-	-	-	31	-	5 150	(D)	(W)	(D)
\$5,000,000 to \$9,999,999 .....	50	3	2 998	(D)	2	2	(D)	48	1	2 998	1 069 215	(W)	(W)
\$2,500,000 to \$4,999,999 .....	109	8	3 593	(D)	2	1	(D)	107	7	3 593	367 976	(W)	(W)
\$1,000,000 to \$2,499,999 .....	333	35	5 261	1 963 012	10	11	31 405	323	24	5 261	494 416	4	5
\$500,000 to \$999,999 .....	467	91	4 453	327 000	35	27	23 576	432	64	4 453	303 424	6	6
\$250,000 to \$499,999 .....	911	362	4 857	319 196	138	136	47 454	773	226	4 857	271 742	7	5
\$100,000 to \$249,999 .....	1 970	1 157	4 498	304 711	651	681	96 627	1 319	476	4 498	208 084	5	5
\$50,000 to \$99,999 .....	2 331	1 836	2 161	162 266	1 306	1 397	88 645	1 025	439	2 161	73 621	7	6
\$25,000 to \$49,999 .....	2 753	2 420	1 063	96 094	2 077	2 133	71 905	676	287	1 063	24 189	8	7
Less than \$25,000 .....	11 962	11 314	1 515	96 040	10 624	10 667	81 020	1 338	647	1 515	15 020	5	6
\$10,000 to \$24,999 .....	(NA)	(NA)	(NA)	(NA)	3 466	3 505	54 712	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 .....	(NA)	(NA)	(NA)	(NA)	2 468	2 493	16 674	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 .....	(NA)	(NA)	(NA)	(NA)	2 627	2 625	7 571	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 .....	(NA)	(NA)	(NA)	(NA)	2 063	2 044	2 063	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.



**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
A	B	C	D	E	F	G	H		
	Construction Industries and land subdividers and developers -----	6 469	38 504	29 685	786 241	573 291	44 590	3 675 649	2 759 695
15, 16, 17	Construction Industries:								
15	Building construction—General contractors and operative builders:								
152	General contractors, residential buildings:								
1521	Single-family houses -----	1 234	3 673	2 636	47 715	31 787	3 324	329 129	225 695
1522	Other residential buildings -----	120	837	653	13 202	8 560	664	96 020	45 819
1531	Operative builders -----	156	397	143	9 396	(D)	234	126 024	69 836
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	84	1 068	814	24 392	15 437	1 193	129 056	87 069
1542	Nonresidential buildings, n.e.c. -----	396	3 214	2 242	80 706	51 954	3 727	683 032	268 254
16	Heavy construction other than building construction—contractors:								
1611	Highway and street construction -----	213	2 775	2 242	73 305	55 384	3 588	352 965	289 071
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	17	421	305	12 201	9 134	469	55 915	42 041
1623	Water, sewer, and utility lines -----	119	1 458	1 189	32 503	24 276	1 864	126 868	105 140
1629	Heavy construction, n.e.c. -----	182	971	721	22 667	16 661	1 039	136 822	105 522
17	Special trade contractors:								
1711	Plumbing, heating, and air-conditioning -----	632	4 632	3 374	108 437	77 986	5 450	377 566	338 380
1721	Painting and paper hanging -----	410	1 620	1 411	23 563	20 266	2 059	71 186	69 511
1731	Electrical work -----	514	4 214	3 214	99 516	74 867	5 065	301 654	290 251
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	169	663	596	11 758	9 642	882	40 335	38 874
1742	Plastering, drywall, and insulation work -----	280	2 032	1 752	34 425	27 580	2 524	102 970	98 265
1743	Terrazzo, tile, marble, and mosaic work -----	46	(S)	(S)	9 526	(D)	(S)	(S)	(D)
175	Carpentry and floor work:								
1751	Carpentry -----	338	1 206	984	16 639	13 410	1 427	59 322	54 174
1752	Floor laying and other floor work -----	139	594	462	10 892	8 161	656	53 709	45 165
1761	Roofing, siding, and sheet metal work -----	354	2 700	2 124	40 571	29 377	2 877	153 110	146 405
1771	Concrete work -----	274	1 508	1 277	24 210	20 344	1 782	86 577	80 606
1781	Water well drilling -----	53	169	114	2 960	1 986	162	12 179	12 039
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	31	524	460	12 891	11 381	776	55 572	(D)
1793	Glass and glazing work -----	56	425	308	9 251	6 931	521	52 964	52 716
1794	Excavation work -----	174	672	550	14 459	11 276	960	61 790	58 817
1795	Wrecking and demolition work -----	20	89	72	1 742	1 398	111	7 116	6 371
1796	Installing building equipment, n.e.c. -----	65	829	710	24 860	19 138	1 356	62 380	58 835
1799	Special trade contractors, n.e.c. -----	299	1 270	1 017	21 585	16 232	1 423	79 769	74 847
6552	Land subdividers and developers, n.e.c. -----	83	206	*18	2 860	*265	*35	36 148	28 432

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
1 739 743	1 117 657	915 953	77 728	61 510	474 799	35 551	2 751 886	1 289 292	1	1	5	15, 16, 17
												15
128 055 22 586	109 412 23 928	103 434 50 200	3 696 497	4 303 220	29 853 7 565	3 306 416	182 868 55 240	77 375 14 272	8 15	8 10	21 5	152 1521 1522
38 836	33 911	56 188	*397	*1 713	25 129	909	106 293	54 926	15	19	44	1531
50 410 165 370	38 789 112 073	41 986 414 777	1 106 7 957	*1 050 4 148	9 515 30 426	788 3 578	80 671 629 189	28 600 139 180	12 5	10 5	45 14	154 1541 1542
												16
199 976	110 749	63 893	19 756	13 619	93 981	2 386	226 090	120 155	5	4	11	1611
22 370 64 772 67 295	19 873 41 517 41 057	13 874 21 727 31 300	2 114 5 371 5 786	893 4 020 3 841	24 003 25 876 42 756	488 2 140 1 064	54 881 147 553 83 950	21 188 103 536 51 067	1 6 8	2 8 7	(W) 21 29	162 1622 1623 1629
												17
199 510	144 130	39 186	5 747	5 631	36 070	3 794	255 820	135 783	3	3	17	1711
53 067	16 512	1 674	1 274	934	6 433	861	34 601	25 486	10	11	29	1721
184 236	119 734	11 402	3 553	5 052	33 166	3 167	224 167	131 156	5	3	9	1731
25 279 64 388 (S)	(D) (D) (S)	1 460 4 704 (D)	547 1 416 (S)	221 1 895 (S)	4 807 9 228 (S)	494 2 380 (D)	19 391 105 779 (D)	11 870 59 844 18 400	8 5 (S)	8 5 (D)	22 15 (S)	174 1741 1742 1743
35 517 26 435	19 003 21 520	5 147 *8 544	739 505	1 192 471	5 898 2 208	885 528	32 533 21 795	17 097 10 329	9 10	9 16	28 20	175 1751 1752
85 817	61 871	6 705	3 167	1 391	12 202	1 637	81 273	44 659	7	6	20	1761
54 399	27 260	5 970	3 687	2 127	12 701	1 642	83 398	46 366	9	7	23	1771
7 236	4 870	140	272	199	2 895	159	7 157	4 495	33	28	19	1781
28 528 24 615 45 261 5 301 44 394 49 720	14 075 30 178 14 650 *1 270 (D) 28 630	(D) 247 2 972 *744 3 545 4 922	1 826 865 4 312 191 1 155 1 155	651 *357 4 959 268 605 1 139	4 123 2 041 36 192 2 218 2 304 7 984	(S) 310 1 522 (D) 885 647	(S) 34 899 100 475 2 016 68 260 (D)	(S) 17 808 62 583 1 598 41 025 19 654	5 16 13 22 8 11	(D) 10 15 22 3 12	7 55 22 13 16 18	179 1791 1793 1794 1795 1796 1799
29 429	1 390	7 716	483	353	3 254	196	9 023	*2 552	29	18	29	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	6 469	6 075	7 273	5 951	1	2	3	4
Proprietors and working partners .....	1 616	2 172	4 624	4 042	6	5	5	5
All employees** .....	38 504	35 551	45 475	38 722	1	2	1	2
Construction workers:								
March .....	26 436	25 272	32 901	26 784	2	2	2	2
May .....	29 130	28 292	39 006	31 039	2	2	2	3
August .....	32 739	30 568	41 426	37 158	2	2	2	3
November .....	30 434	25 685	37 663	32 955	2	2	2	3
Average .....	29 685	28 157	37 786	32 662	1	2	2	3
Other employees:								
March .....	8 615	7 347	7 570	5 686	2	2	2	3
May .....	8 737	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
August .....	9 028	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
November .....	8 898	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Average .....	8 819	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	9 531	8 482	(NA)	(NA)	2	2	(NA)	(NA)
April to June .....	10 929	9 986	(NA)	(NA)	2	2	(NA)	(NA)
July to September .....	12 639	11 039	(NA)	(NA)	2	2	(NA)	(NA)
October to December .....	11 489	9 120	(NA)	(NA)	2	2	(NA)	(NA)
Total hours worked .....	44 590	38 629	(NA)	(NA)	2	2	(NA)	(NA)
Payroll, all employees .....	786 241	673 683	627 123	365 692	1	1	1	2
Payroll, construction workers .....	573 291	512 606	504 366	302 411	1	1	1	2
Payroll, other employees .....	212 950	161 077	122 757	63 281	2	1	1	3
First quarter payroll, all employees .....	161 151	150 531	128 806	(NA)	1	1	1	(NA)
Employer costs for fringe benefits, all employees .....	190 686	132 702	145 842	(NA)	1	1	1	(NA)
Legally required expenditures .....	133 157	100 869	86 238	(NA)	2	1	1	(NA)
Voluntary expenditures .....	57 528	31 833	59 604	(NA)	2	2	1	(NA)
Dollar value of business done .....	3 799 835	2 827 689	2 597 564	1 517 383	1	1	1	2
Value of construction work <sup>1</sup> .....	3 675 649	2 751 886	2 566 932	1 443 701	1	1	1	2
Value of construction work subcontracted in from others .....	906 512	687 770	702 034	296 921	4	2	2	4
Land receipts <sup>2</sup> .....	26 481	15 455	(NA)	(NA)	13	11	(NA)	(NA)
Other business receipts .....	97 705	60 347	130 632	73 682	6	4	4	5
Net value of construction† .....	2 759 695	2 038 079	1 980 424	1 095 033	1	1	1	3
Value added†† .....	1 739 743	1 289 292	1 189 190	689 878	1	1	1	3
Selected costs .....	2 033 610	1 522 941	1 454 371	802 532	2	1	2	3
Materials, components, and supplies <sup>3</sup> .....	1 059 183	756 372	823 188	453 864	2	1	2	3
Construction work subcontracted to others .....	915 953	713 807	586 508	348 668	3	2	2	4
Selected power, fuels, and lubricants .....	58 474	52 761	44 675	(NA)	2	2	2	(NA)
Electricity .....	7 960	6 656	5 094	(NA)	5	3	3	(NA)
Natural gas .....	3 012	3 120	2 569	(NA)	6	2	4	(NA)
Gasoline and diesel fuel .....	43 654	39 543	30 817	(NA)	2	2	2	(NA)
On highway use .....	32 437	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use .....	11 217	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	3 846	3 440	6 197	(NA)	5	5	4	(NA)
Rental cost for machinery, equipment, and buildings .....	77 728	60 584	43 197	(NA)	4	2	1	(NA)
For machinery and equipment .....	56 560	46 127	36 381	28 198	4	2	1	8
For buildings .....	21 167	14 456	6 815	(NA)	5	3	4	(NA)
Selected purchased services .....	65 917	48 092	45 731	(NA)	3	2	2	(NA)
Communication services .....	17 759	13 926	10 585	(NA)	3	4	3	(NA)
Repairs to buildings and other structures .....	3 262	1 856	2 578	(NA)	8	8	7	(NA)
Repairs to machinery and equipment .....	44 895	32 309	32 569	(NA)	3	2	2	(NA)
Ownership of construction projects:								
Value of construction work .....	3 675 649	2 751 886	2 566 932	1 443 701	1	1	1	2
Government owned .....	869 876	741 111	496 803	441 852	5	3	2	5
Federal .....	285 143	(NA)	(NA)	(NA)	5	(NA)	(NA)	(NA)
State and local .....	584 733	(NA)	(NA)	(NA)	7	(NA)	(NA)	(NA)
Privately owned .....	2 805 772	2 010 775	2 070 129	1 001 849	2	2	2	3

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT				
Beginning-of-year gross book value of depreciable assets -----	436 137	552 337	3	3
Capital expenditures, other than land -----	61 510	45 181	5	3
New -----	37 516	25 299	5	4
Used -----	23 994	19 882	9	5
Retirements and disposition of depreciable assets -----	22 848	20 397	9	7
End-of-year gross book value of depreciable assets -----	474 799	577 121	3	3
Depreciation charges during year -----	53 301	70 549	3	3
Buildings and Other Structures, Additions, and Related Facilities				
Beginning-of-year gross book value of depreciable assets -----	76 235	98 661	7	6
Capital expenditures, other than land -----	6 626	4 959	15	14
New buildings and other structures -----	3 523	2 415	20	4
Used buildings and other structures -----	3 102	2 544	23	28
Retirements and disposition of depreciable assets -----	3 435	3 977	18	19
End-of-year gross book value of depreciable assets -----	79 426	99 643	7	6
Depreciation charges during year -----	6 120	7 604	7	6
Machinery and Equipment				
Beginning-of-year gross book value of depreciable assets -----	359 901	453 675	3	3
Capital expenditures, other than land -----	54 884	40 222	5	4
New machinery and equipment, including automobiles and trucks -----	33 993	22 884	6	4
New automobiles and trucks, intended primarily for highway use -----	15 763	9 017	7	7
Used machinery and equipment, including automobiles and trucks -----	20 891	17 338	9	4
Retirements and disposition of depreciable assets -----	19 412	16 419	9	5
End-of-year gross book value of depreciable assets -----	395 373	477 478	3	3
Depreciation charges during year -----	47 181	62 944	3	3

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
All establishments:		
Number .....	6 469	1
Value of construction work .....	3 675 649	1
Establishments with inventories:		
Number .....	2 444	4
Value of construction work .....	1 913 197	3
Inventories <sup>1</sup> :		
End of 1987, materials and supplies .....	43 770	6
End of 1986, materials and supplies .....	41 410	7
Establishments with no inventories:		
Number .....	2 996	4
Value of construction work .....	1 285 967	4
Establishments not reporting:		
Number .....	1 029	7
Value of construction work .....	476 485	6

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—								
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 employees or more
<b>1987</b>										
Number of establishments .....	6 469	(S)	1 168	616	257	55	17	2	-	-
All employees** .....	38 504	(S)	7 522	8 189	7 643	3 579	3 180	(D)	-	-
Payroll, all employees .....	786 241	(S)	122 214	165 461	193 654	98 175	88 440	(D)	-	-
Construction worker hours (thousands) .....	44 590	(S)	7 607	10 130	9 183	4 552	3 935	(D)	-	-
Dollar value business done .....	3 799 835	(S)	624 644	707 802	907 056	439 056	330 532	(D)	-	-
Value of construction work <sup>1</sup> .....	3 675 649	(S)	607 397	681 090	886 314	742 410	(D)	(D)	-	-
Net value of construction work <sup>†</sup> .....	2 759 695	(S)	461 815	531 275	637 595	314 342	234 098	(D)	-	-
Value added <sup>††</sup> .....	1 739 743	(S)	292 060	344 879	400 382	202 120	148 449	(D)	-	-
Cost of materials, components, supplies, and fuels .....	1 117 657	(S)	183 173	207 027	255 880	225 050	(D)	(D)	-	-
Cost of construction work subcontracted to others .....	915 953	(S)	145 582	149 815	248 718	193 969	(D)	(D)	-	-
Rental cost for machinery, equipment, and buildings .....	77 728	(S)	15 563	19 153	18 552	9 587	5 243	(D)	-	-
Capital expenditures, other than land .....	61 510	(S)	13 666	13 057	9 966	8 096	2 580	(D)	-	-
End-of-year gross book value of depreciable assets .....	474 799	(S)	85 782	117 169	85 448	64 845	15 734	(D)	-	-
<b>1982</b>										
All employees** .....	35 551	7 894	6 107	6 465	6 518	2 654	3 713	2 199	(D)	-
Value of construction work <sup>1</sup> .....	2 751 886	413 658	382 379	449 806	601 134	273 671	631 238	(D)	(D)	-
Value added <sup>††</sup> .....	1 289 292	199 515	183 869	229 989	275 762	136 490	263 666	(D)	(D)	-
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>										
All employees** .....	1	(S)	6	5	4	3	(W)	(D)	-	-
Net value of construction work <sup>†</sup> .....	1	(S)	6	4	2	1	(W)	(D)	-	-
Capital expenditures, other than land .....	5	(S)	17	12	4	(W)	(W)	(D)	-	-

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments .....	6 469	(S)	(S)	(S)	2 099	1 006	587	523	147	80	36
All employees** .....	38 504	(S)	(S)	(S)	6 261	5 510	5 096	7 299	3 991	3 961	3 290
Payroll, all employees .....	786 241	(S)	(S)	(S)	80 622	87 810	94 762	167 936	105 184	117 485	106 364
Construction worker hours (thousands) .....	44 590	(S)	(S)	(S)	6 789	6 107	6 042	8 810	4 570	5 214	4 002
Dollar value of business done .....	3 799 835	(S)	(S)	(S)	337 738	363 653	422 350	783 617	498 949	562 177	724 706
Value of construction work <sup>1</sup> .....	3 675 649	(S)	(S)	(S)	330 285	353 008	405 596	755 344	481 423	534 982	710 371
Net value of construction work† .....	2 759 695	(S)	(S)	(S)	299 323	307 966	333 958	582 544	352 859	395 533	390 611
Value added†† .....	1 739 743	(S)	(S)	(S)	184 070	194 941	219 133	370 041	216 075	249 601	244 368
Cost of materials, components, supplies, and fuels .....	1 117 657	(S)	(S)	(S)	122 095	121 464	126 147	234 194	149 649	327 368	(D)
Cost of construction work subcontracted to others .....	915 953	(S)	(S)	(S)	30 962	45 041	71 637	172 800	128 564	139 449	319 760
Rental cost for machinery, equipment, and buildings .....	77 728	(S)	(S)	(S)	7 562	8 560	7 466	17 959	11 765	14 795	8 513
Capital expenditures, other than land .....	61 510	(S)	(S)	(S)	7 742	9 559	9 243	12 685	6 677	9 012	4 909
End-of-year gross book value of depreciable assets .....	474 799	(S)	(S)	(S)	56 466	59 973	58 003	108 780	43 024	82 040	45 917
<b>1982</b>											
All employees** .....	35 551	1 515	1 063	2 161	4 498	4 857	4 453	5 261	3 593	2 998	5 150
Value of construction work <sup>1</sup> .....	2 751 886	14 565	23 706	71 270	203 358	262 976	292 013	480 992	354 167	327 959	720 878
Value added†† .....	1 289 292	7 318	12 197	38 441	108 820	139 312	150 158	236 196	173 875	137 033	285 938
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** .....	1	(S)	(S)	(S)	5	7	7	3	4	(W)	(W)
Net value of construction work† .....	1	(S)	(S)	(S)	4	6	7	5	5	(W)	(W)
Capital expenditures, other than land .....	5	(S)	(S)	(S)	14	17	18	14	9	1	3

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair				
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	3 675 649	2 186 465	843 102	429 305	1	2	3	3
<b>Building construction</b> .....	2 635 578	1 683 575	637 394	298 228	2	2	3	4
Single-family houses .....	776 223	521 137	166 045	89 040	5	7	6	9
Single-family houses, detached .....	681 373	451 006	153 311	77 055	5	7	6	10
Single-family houses, attached .....	94 850	70 131	12 734	11 985	15	18	15	18
Apartment buildings with two or more apartments .....	152 374	121 677	13 154	17 542	7	7	21	8
Other residential buildings, including hotels and motels .....	52 443	26 880	13 975	11 587	8	12	17	9
Hotels and motels .....	28 383	13 490	7 951	6 941	11	16	21	10
Other residential buildings, excluding hotels and motels .....	24 060	13 390	6 024	4 646	13	17	28	16
Office buildings .....	388 835	255 040	101 810	31 984	3	4	7	5
Other commercial buildings such as stores, restaurants, and automobile service stations .....	466 876	288 106	123 505	55 264	4	4	9	6
Industrial buildings and warehouses .....	364 881	207 193	102 447	55 240	4	5	5	9
Industrial buildings .....	289 120	156 580	85 261	47 278	4	6	4	10
Warehouses .....	75 761	50 613	17 186	7 962	7	8	16	18
Religious buildings .....	19 683	6 570	9 782	3 331	12	14	18	17
Educational buildings .....	141 319	78 912	45 210	17 196	5	5	9	9
Hospitals and institutional buildings .....	163 115	120 846	33 643	8 626	2	1	6	6
Farm buildings .....	10 079	5 346	2 922	1 810	18	27	27	18
Amusement, social, and recreational buildings .....	33 419	23 468	6 750	3 200	8	8	15	13
Other nonresidential buildings .....	49 944	28 400	18 151	3 408	10	6	20	9
Land development for buildings .....	16 382	(NA)	(NA)	(NA)	33	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	839 676	502 890	205 708	131 077	3	3	4	6
Highways, streets, and related facilities .....	354 728	198 983	111 153	44 590	4	6	6	10
Outdoor swimming pools .....	15 562	12 650	*571	*2 340	28	28	62	53
Parking areas including private driveways .....	13 422	7 997	3 821	1 602	19	19	40	20
Bridges, tunnels, and elevated highways .....	60 375	43 997	10 695	5 682	2	3	(W)	14
Marine construction .....	19 176	4 643	(D)	(D)	15	19	(D)	(D)
Harbor and port facilities .....	15 706	6 388	(D)	(D)	5	8	(D)	(D)
Conservation and development construction .....	11 820	7 345	4 126	349	22	24	36	32
Power and communication transmission lines, towers, and related facilities .....	65 159	46 005	9 007	10 146	5	6	2	5
Sewers, water mains, and related facilities .....	113 693	85 897	14 587	13 208	9	10	10	20
Sewers, sewer lines, and related facilities .....	70 755	53 521	9 193	8 039	11	12	12	12
Water mains and related facilities .....	42 938	32 376	5 394	*5 169	16	16	20	46
Pipeline, other than sewer or water lines .....	9 032	7 493	644	894	13	13	11	32
Heavy industrial facilities .....	34 829	9 191	18 802	6 834	2	5	2	(W)
Sewage treatment and water treatment plants .....	37 420	22 462	13 169	1 787	9	11	12	17
Sewage treatment plants .....	23 832	11 972	11 394	465	14	21	8	6
Water treatment plants .....	13 588	10 490	*1 775	1 322	7	1	49	23
Earthmoving, nonbuilding .....	22 064	15 980	2 674	*3 409	14	11	35	63
Other nonbuilding construction .....	66 690	33 859	15 452	17 394	15	15	23	27
<b>Construction work, n.s.k.</b> .....	200 394	(NA)	(NA)	(NA)	6	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	2 751 886	2 254 979	(NA)	496 906	1	1	(NA)	2
<b>Building construction</b> .....	1 870 985	1 551 793	(NA)	319 192	1	1	(NA)	2
Single-family houses .....	438 883	333 452	(NA)	105 431	4	4	(NA)	5
Single-family houses, detached .....	381 832	285 946	(NA)	95 885	5	5	(NA)	6
Single-family houses, attached .....	57 051	47 505	(NA)	9 545	6	7	(NA)	15
Apartment buildings with two or more apartments .....	76 544	61 495	(NA)	15 049	8	9	(NA)	9
Other residential buildings, including hotels and motels .....	41 531	35 001	(NA)	6 529	11	13	(NA)	5
Office buildings .....	417 438	371 352	(NA)	46 085	2	1	(NA)	2
Other commercial buildings such as stores, restaurants, and automobile service stations .....	206 902	167 517	(NA)	39 384	4	4	(NA)	8
Industrial buildings and warehouses .....	350 885	281 996	(NA)	68 888	2	3	(NA)	4
Industrial buildings .....	281 039	222 383	(NA)	58 655	3	3	(NA)	5
Warehouses .....	69 845	59 613	(NA)	10 232	4	3	(NA)	7
Religious buildings .....	22 814	18 915	(NA)	3 899	10	12	(NA)	6
Educational buildings .....	103 024	89 472	(NA)	13 552	4	5	(NA)	7
Hospitals and institutional buildings .....	146 733	133 808	(NA)	12 925	3	3	(NA)	5
Amusement, social, and recreational buildings .....	19 576	18 056	(NA)	1 519	4	4	(NA)	9
Other nonresidential buildings .....	46 650	40 723	(NA)	5 925	6	7	(NA)	25
<b>Nonbuilding construction</b> .....	718 868	572 355	(NA)	146 515	2	2	(NA)	5
Highways, streets, and related facilities .....	286 663	205 650	(NA)	81 012	3	4	(NA)	9
Bridges, tunnels, and elevated highways .....	76 963	63 482	(NA)	13 481	7	7	(NA)	4
Marine construction .....	22 260	15 923	(NA)	6 336	8	11	(NA)	4
Power and communication transmission lines, towers, and related facilities .....	95 389	87 168	(NA)	8 220	3	3	(NA)	5
Sewers, water mains, and related facilities .....	87 251	75 862	(NA)	11 388	5	4	(NA)	9
Sewers, sewer lines, and related facilities .....	52 350	44 902	(NA)	7 448	6	7	(NA)	13
Water mains and related facilities .....	34 900	30 959	(NA)	3 940	5	6	(NA)	4
Pipeline, other than sewer or water lines .....	11 801	10 799	(NA)	1 002	(W)	(W)	(NA)	(W)
Heavy industrial facilities .....	42 701	36 085	(NA)	6 615	2	3	(NA)	7
Sewage treatment and water treatment plants .....	31 328	28 686	(NA)	2 642	6	6	(NA)	17
Sewage treatment plants .....	11 075	8 901	(NA)	2 174	16	19	(NA)	8
Water treatment plants .....	20 252	19 785	(NA)	*467	4	2	(NA)	68
Other nonbuilding construction .....	64 505	48 693	(NA)	15 808	12	13	(NA)	23
<b>Construction work, n.s.k.</b> .....	162 032	130 830	(NA)	31 202	5	5	(NA)	7

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction industries and land subdividers and developers -----</b>	<b>6 469</b>	<b>29 685</b>	<b>44 590</b>	<b>26 436</b>	<b>9 531</b>	<b>29 130</b>	<b>10 929</b>
<b>15, 16, 17</b>	<b>Construction industries:</b>							
<b>15</b>	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	1 234	2 636	3 324	2 453	744	2 601	811
1522	Other residential buildings -----	120	653	664	841	179	518	155
1531	Operative builders -----	156	143	234	126	51	171	63
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	84	814	1 193	711	262	687	259
1542	Nonresidential buildings, n.e.c. -----	396	2 242	3 727	2 041	840	2 219	906
<b>16</b>	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	213	2 242	3 588	1 423	512	2 279	890
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	17	305	469	227	100	275	108
1623	Water, sewer, and utility lines -----	119	1 189	1 884	884	366	1 091	430
1629	Heavy construction, n.e.c. -----	182	721	1 039	587	186	689	253
<b>17</b>	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	632	3 374	5 450	3 122	1 213	3 450	1 366
1721	Painting and paper hanging -----	410	1 411	2 059	1 098	370	1 290	488
1731	Electrical work -----	514	3 214	5 065	2 896	1 155	3 460	1 229
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	169	596	682	464	146	509	200
1742	Plastering, drywall, and insulation work --	260	1 752	2 524	1 666	566	1 556	560
1743	Terrazzo, tile, marble, and mosaic work -	46	(S)	(S)	(S)	(S)	(S)	(S)
175	Carpentry and floor work:							
1751	Carpentry -----	336	964	1 427	922	314	1 007	364
1752	Floor laying and other floor work -----	139	462	656	455	159	460	168
1761	Roofing, siding, and sheet metal work -----	354	2 124	2 877	1 867	623	1 971	674
1771	Concrete work -----	274	1 277	1 762	1 247	432	1 282	486
1781	Water well drilling -----	53	114	162	92	28	125	*51
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	31	460	776	403	139	563	249
1793	Glass and glazing work -----	56	306	521	279	116	293	125
1794	Excavation work -----	174	550	960	414	165	571	246
1795	Wrecking and demolition work -----	20	72	111	80	25	76	30
1796	Installing building equipment, n.e.c. -----	65	710	1 356	641	395	750	355
1799	Special trade contractors, n.e.c. -----	299	1 017	1 423	955	310	936	336
6552	Land subdividers and developers, n.e.c. --	83	*18	*35	*9	*5	*20	*7

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
32 739	12 639	30 434	11 489	2	2	2	2	2	2	2	2	2	2	15, 16, 17
														15
2 907 654	974 169	2 586 599	793 160	8 15	10 16	8 24	9 21	8 11	9 13	8 13	10 17	10 14	12 16	152 1521 1522
143	62	133	56	21	30	24	37	23	29	21	31	20	28	1531
														154
894 2 365	321 1 033	965 2 343	350 947	12 6	11 7	14 5	11 7	11 6	9 8	11 7	12 9	15 6	14 7	1541 1542
														16
3 000	1 303	2 265	881	5	6	5	6	5	7	5	7	5	6	1611
														162 1622
431 1 406 839	153 529 320	289 1 374 774	107 537 278	1 6 9	3 7 14	3 6 9	4 10 12	1 6 9	1 7 15	1 7 9	4 8 16	(W) 6 10	2 9 14	1623 1629
														17
3 529	1 471	3 397	1 399	3	4	3	4	3	5	3	5	3	5	1711
1 801	665	1 457	534	10	12	10	11	10	11	13	14	12	15	1721
3 199	1 302	3 279	1 378	5	4	3	6	15	4	4	4	4	5	1731
														174
613 1 956 (S)	217 695 (S)	780 1 806 (S)	317 660 (S)	9 5 (S)	12 7 (S)	10 6 (S)	14 7 (S)	11 5 (S)	11 8 (S)	10 7 (S)	10 7 (S)	8 6 (S)	31 7 (S)	1741 1742 1743
1 020 480	400 166	985 453	348 164	10 11	15 15	10 10	16 14	10 11	14 15	11 12	16 17	10 12	16 17	175 1751 1752
2 516	854	2 143	725	7	9	11	11	8	9	8	10	8	10	1761
1 342	485	1 236	377	9	11	9	11	10	12	11	15	10	13	1771
136	47	*103	*34	26	36	18	16	22	43	27	34	41	48	1781
														179
445 322 625 63 573 1 149	212 132 275 26 282 413	429 337 591 68 678 1 031	175 146 273 28 323 362	6 17 13 19 9 11	5 16 16 23 12 15	6 17 14 31 17 12	9 15 18 30 21 15	5 17 13 18 8 10	6 15 17 27 14 14	7 17 14 15 10 12	5 14 19 19 10 17	8 18 15 14 5 12	6 20 18 16 11 17	1791 1793 1794 1795 1796 1799
*25	*12	*20	*10	47	54	50	60	50	51	44	51	50	59	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee -(\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction Industries and land subdividers and developers</b> -----	<b>6.0</b>	<b>20.4</b>	<b>1 502.1</b>	<b>123.8</b>	<b>.214</b>	<b>.304</b>	<b>.249</b>	<b>.021</b>
15, 16, 17	<b>Construction Industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses-----	3.0	13.0	1 261.0	124.9	.145	.332	.314	.011
1522	Other residential buildings-----	7.0	15.8	1 016.8	147.0	.137	.249	.523	.005
1531	Operative builders-----	2.5	23.7	1 636.4	881.3	.075	.269	.446	.003
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses-----	12.7	22.8	1 465.6	158.5	.189	.301	.325	.009
1542	Nonresidential buildings, n.e.c.-----	8.1	25.1	1 662.4	304.7	.118	.164	.607	.012
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction-----	13.0	26.4	1 600.4	157.4	.208	.314	.181	.056
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction-----	24.8	29.0	1 537.7	183.3	.218	.355	.248	.038
1623	Water, sewer, and utility lines-----	12.3	22.3	1 567.7	106.7	.256	.327	.171	.042
1629	Heavy construction, n.e.c.-----	5.3	23.3	1 441.1	189.8	.166	.300	.229	.042
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning-----	7.3	23.4	1 615.3	111.9	.287	.382	.104	.015
1721	Painting and paper hanging-----	4.0	14.5	1 459.2	50.5	.331	.232	.024	.018
1731	Electrical work-----	8.2	23.6	1 575.9	93.9	.330	.397	.038	.012
174	Masonry, stoneowrk, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework-----	3.9	17.7	1 479.9	67.7	.292	(D)	.036	.014
1742	Plastering, drywall, and insulation work-----	7.3	16.9	1 440.6	58.8	.334	(D)	.046	.014
1743	Terrazzo, tile, marble, and mosaic work-----	(S)	(S)	(S)	(S)	(S)	(S)	(D)	(S)
175	Carpentry and floor work:								
1751	Carpentry-----	3.6	13.8	1 450.2	60.3	.280	.320	.087	.012
1752	Floor laying and other floor work-----	4.3	18.3	1 419.9	116.3	.203	.401	.159	.009
1761	Roofing, siding, and sheet metal work-----	7.6	15.0	1 354.5	72.1	.265	.404	.044	.021
1771	Concrete work-----	5.5	16.1	1 395.5	67.8	.280	.315	.069	.043
1781	Water well drilling-----	3.2	17.5	1 421.1	106.8	.243	.400	.011	.022
179	Miscellaneous special trade contractors:								
1791	Structural steel erection-----	16.9	24.6	1 687.0	120.8	.232	.253	(D)	.033
1793	Glass and glazing work-----	7.6	21.8	1 691.6	172.0	.175	.570	.005	.016
1794	Excavation work-----	3.9	21.5	1 745.5	112.3	.234	.237	.048	.070
1795	Wrecking and demolition work-----	4.4	19.6	1 541.7	98.8	.245	*.178	*.105	.027
1796	Installing building equipment, n.e.c.-----	12.8	30.0	1 909.9	87.9	.399	(D)	.057	.019
1799	Special trade contractors, n.e.c.-----	4.2	17.0	1 399.2	78.4	.271	.359	.062	.014
6552	<b>Land subdividers and developers, n.e.c.</b> -----	<b>2.5</b>	<b>13.9</b>	<b>*1 944.4</b>	<b>2 008.2</b>	<b>.079</b>	<b>.038</b>	<b>.213</b>	<b>.013</b>

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>PORTLAND-VANCOUVER, OR- WA CMSA</b>											
	Construction industries and land subdividers and developers .....	3 489	25 150	540 609	2 549 523	1 892 527	1 175 234	782 377	656 996	35 472	2	1
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	669	2 181	30 731	204 650	140 264	79 503	66 213	64 386	3 116	10	11
1522	Other residential buildings .....	53	533	9 914	76 436	34 764	16 811	18 187	41 672	234	17	8
1531	Operative builders .....	124	379	8 597	114 369	60 591	28 997	34 239	53 778	*1 590	17	18
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	57	461	10 444	72 522	43 973	25 034	20 085	28 549	314	9	13
1542	Nonresidential buildings, n.e.c. ....	230	2 408	60 728	502 247	208 346	124 832	89 811	293 901	2 315	6	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction .....	62	1 354	40 942	214 514	175 726	115 210	70 162	38 788	6 569	6	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines .....	54	938	18 925	71 135	57 582	37 094	21 390	13 553	2 577	6	8
1629	Heavy construction, n.e.c. ....	65	597	14 272	87 686	63 635	39 160	26 219	24 051	1 754	7	7
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning .....	360	3 390	82 293	280 566	251 594	151 078	105 106	28 973	3 463	3	3
1721	Painting and paper hanging .....	239	1 104	17 607	43 705	42 494	33 186	9 324	1 211	443	12	10
1731	Electrical work .....	268	2 675	71 004	209 520	203 183	126 820	86 242	6 337	4 145	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	98	474	9 776	31 415	30 050	20 148	11 392	1 365	180	10	11
1742	Plastering, drywall, and insulation work .....	135	1 474	26 889	79 445	74 077	50 667	31 739	5 368	945	6	5
1743	Terrazzo, tile, marble, and mosaic work .....	18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork .....	110	588	11 580	57 280	48 874	28 119	24 369	*8 406	511	9	15
1761	Roofing, siding, and sheet metal work .....	167	1 752	29 172	106 884	101 685	57 946	44 556	5 199	943	9	7
1771	Concrete work .....	186	1 015	15 530	51 369	47 211	29 628	17 640	4 159	944	10	9
1781	Water well drilling .....	20	135	2 771	13 427	(D)	7 183	6 128	(D)	178	32	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	23	434	10 516	49 721	(D)	25 361	12 235	(D)	510	5	(D)
1793	Glass and glazing work .....	52	368	7 647	47 515	47 260	21 577	28 547	*255	*323	22	12
1794	Excavation work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work .....	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ....	29	369	12 730	38 782	(D)	26 087	11 088	(D)	176	7	(D)
1799	Special trade contractors, n.e.c. ....	135	733	12 605	44 771	41 444	27 827	14 256	3 327	*632	14	15
6552	Land subdividers and developers, n.e.c. ....	55	180	2 574	36 006	28 018	28 519	1 436	7 988	325	33	18
	<b>PORTLAND, OR PMSA</b>											
	Construction industries and land subdividers and developers .....	2 877	21 427	466 928	2 180 293	1 602 830	999 190	654 865	577 462	29 274	2	2
15,16, 17	Construction industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	527	1 815	25 963	169 994	117 448	67 237	53 640	52 545	2 780	11	12
1522	Other residential buildings .....	50	512	9 452	74 643	33 217	15 465	17 981	41 426	205	18	9
1531	Operative builders .....	103	229	6 282	89 278	48 015	28 289	22 066	41 264	*1 567	20	22
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	45	410	8 995	63 642	39 917	21 461	19 450	23 726	244	10	14
1542	Nonresidential buildings, n.e.c. ....	194	2 158	54 984	453 122	186 390	111 931	80 541	266 733	2 158	7	6



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	/ Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>PORTLAND, OR PMSA—Con.</b>											
	Construction industries and land subdividers and developers—Con.											
15,16, 17 16	Construction industries—Con.											
	Heavy construction other than building construction—contractors:											
1611	Highway and street construction .....	52	900	26 064	(D)	(D)	65 901	(D)	(D)	5 297	8	(D)
162 1622	Heavy construction, except highway: Bridge, tunnel, and elevated highway construction .....	7	130	3 488	16 293	13 952	7 062	(D)	2 341	(D)	4	5
1623	Water, sewer, and utility lines .....	46	864	17 213	66 118	52 932	33 958	(D)	13 186	(D)	7	8
1629	Heavy construction, n.e.c. ....	49	456	11 863	78 848	55 187	32 669	23 843	(D)	(D)	8	8
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning .....	303	3 080	76 246	255 710	227 513	138 671	93 357	28 196	3 192	3	3
1721	Painting and paper hanging .....	208	1 023	16 393	40 729	39 592	30 887	8 718	1 137	349	12	10
1731	Electrical work .....	240	2 436	64 723	188 103	182 110	114 966	76 532	5 993	3 506	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	78	359	7 381	24 031	22 741	15 197	9 034	1 291	124	6	8
1742	Plastering, drywall, and insulation work .....	99	1 197	22 178	61 665	58 999	41 057	25 953	2 665	800	6	5
1743	Terrazzo, tile, marble, and mosaic work .....	18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry .....	158	642	9 393	31 925	28 863	18 955	9 998	3 062	491	12	11
1752	Floor laying and other floorwork .....	94	481	9 296	48 695	40 434	23 574	19 623	*8 261	388	11	18
1761	Roofing, siding, and sheet metal work .....	140	1 487	25 345	93 368	88 260	50 248	38 814	5 107	697	9	8
1771	Concrete work .....	139	769	12 347	38 594	35 344	22 446	12 955	3 250	*540	11	9
1781	Water well drilling .....	*16	*69	(D)	*5 121	(D)	2 920	(D)	(D)	(D)	62	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	20	412	10 244	48 568	(D)	24 436	12 020	(D)	496	4	(D)
1793	Glass and glazing work .....	31	277	6 519	42 305	42 116	18 442	24 434	*189	*142	21	11
1794	Excavation work .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work .....	*7	(D)	(D)	(D)	3 520	(D)	358	*247	77	(D)	31
1796	Installing building equipment, n.e.c. ....	24	353	12 326	38 162	(D)	25 687	10 891	(D)	176	6	(D)
1799	Special trade contractors, n.e.c. ....	113	653	11 298	41 692	38 429	25 495	13 572	3 263	392	14	16
6552	Land subdividers and developers, n.e.c. ....	49	*148	1 910	34 489	27 288	27 859	1 245	7 201	300	41	18
	<b>VANCOUVER, WA PMSA</b>											
	Construction industries and land subdividers and developers .....	612	3 723	73 681	369 230	289 697	176 045	127 512	79 533	6 198	3	2
	(See appropriate State for SIC detail.)											

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# SUMMARY OF FINDINGS

This report provides results from the 1987 Census of Construction Industries for Washington. The report includes data for construction establishments with payroll and shows limited data for establishments with no payroll (nonemployers). (Establishments with no payroll are, for the most part, companies owned and operated by a single person.)

Establishments covered in this report were primarily engaged in contract construction, construction on their own account for sale, or in subdividing real property into lots, as defined in the 1987 Standard Industrial Classification (SIC) Manual. The SIC Manual defines construction in three broad types: (1) building construction by general contractors or operative builders; (2) heavy construction (highways, power plants, etc.) done by general contractors and selected special trade contractors; and, (3) construction done by special trade contractors such as electricians, plumbers and painters. In addition, this census also includes one industry classified under "Real Estate" in the Manual, SIC 6552, Land Subdividers and Developers, Except Cemeteries.

During 1987, there were 35,091 establishments in this State operating in the construction industries or as land subdividers and developers. These establishments accounted for \$10.7 billion in total value of business done.

Most of the 35,091 construction establishments were small. Of the total, 22,673 were nonemployers, and over half of the employer establishments had less than 5 employees. The 4,330 construction establishments with 5 employees or more, while representing only 12 percent of all establishments, accounted for more than 74 percent of the total value of business done.

## ESTABLISHMENTS WITH PAYROLL

During 1987, the establishments with paid employees accounted for \$9.5 billion on total dollar value of business done. Of this amount, \$9.1 billion were for the value of construction work. Their payments for construction work subcontracted to others amounted to \$2.5 billion, leaving net value of construction work of \$6.7 billion. In addition, these establishments paid out \$3.0 billion for the cost of materials, fuels, power, rental of equipment and buildings,

and the cost of selected purchased services. Value added for 1987 was \$4.2 billion. (See Introduction and appendixes for explanation of terms.)

There were 12,418 establishments with total employment averaging 85,585 during the year. Total payroll for 1987 was \$1.9 billion. Total hours worked by construction workers during the year were 104 million hours.

The data in this report covering establishments with payroll were obtained from a sample survey. A construction establishment is defined as a relatively permanent office, or other place of business, where the usual business activities related to construction are conducted. A separate census report was required from each sample establishment covering domestic operations. Separate reports were not required for each project or construction site.

In 1987, the value of construction work was collected to better measure actual construction activity done during the year. Construction receipts, as reported in earlier censuses, may have included the value of work done before or after the calendar year and may have also excluded work done by builders for their own use. All dollar values are shown in current dollars for the years specified and have not been adjusted for inflation.

Since the data in this report covering employer establishments are estimated from a sample survey, they are subject to sampling variability, as well as errors of response and nonreporting. The relative standard errors shown in the tables are measures of sampling variability. Descriptions of the sampling, estimating procedures, and data reliability are included in the Introduction.

## ESTABLISHMENTS WITHOUT PAYROLL

During 1987, there were 22,673 establishments with no payroll classified as construction or land subdividers and developers. According to administrative records of the Federal Government, their value of business done during 1987 was \$1.3 billion. Most of these establishments, about 66 percent, were special trade contractors.

For the establishments without payroll, only information on total value of business done was available from administrative records. Statistics on establishments without payroll are shown in tables 1 and 2 of this report.

Figure 1. **Selected Costs Per Dollar Value of Business Done**  
(Percent)

1987  
1982

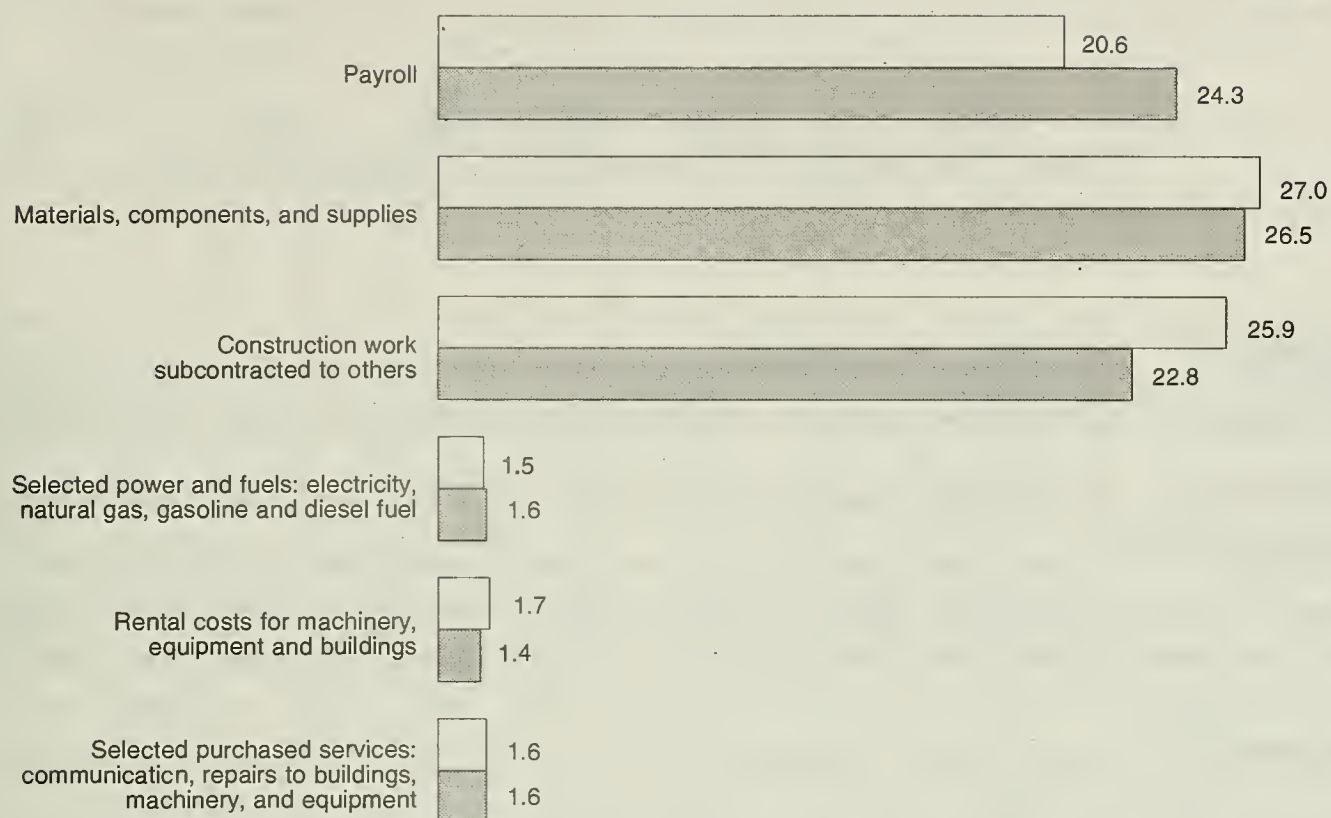
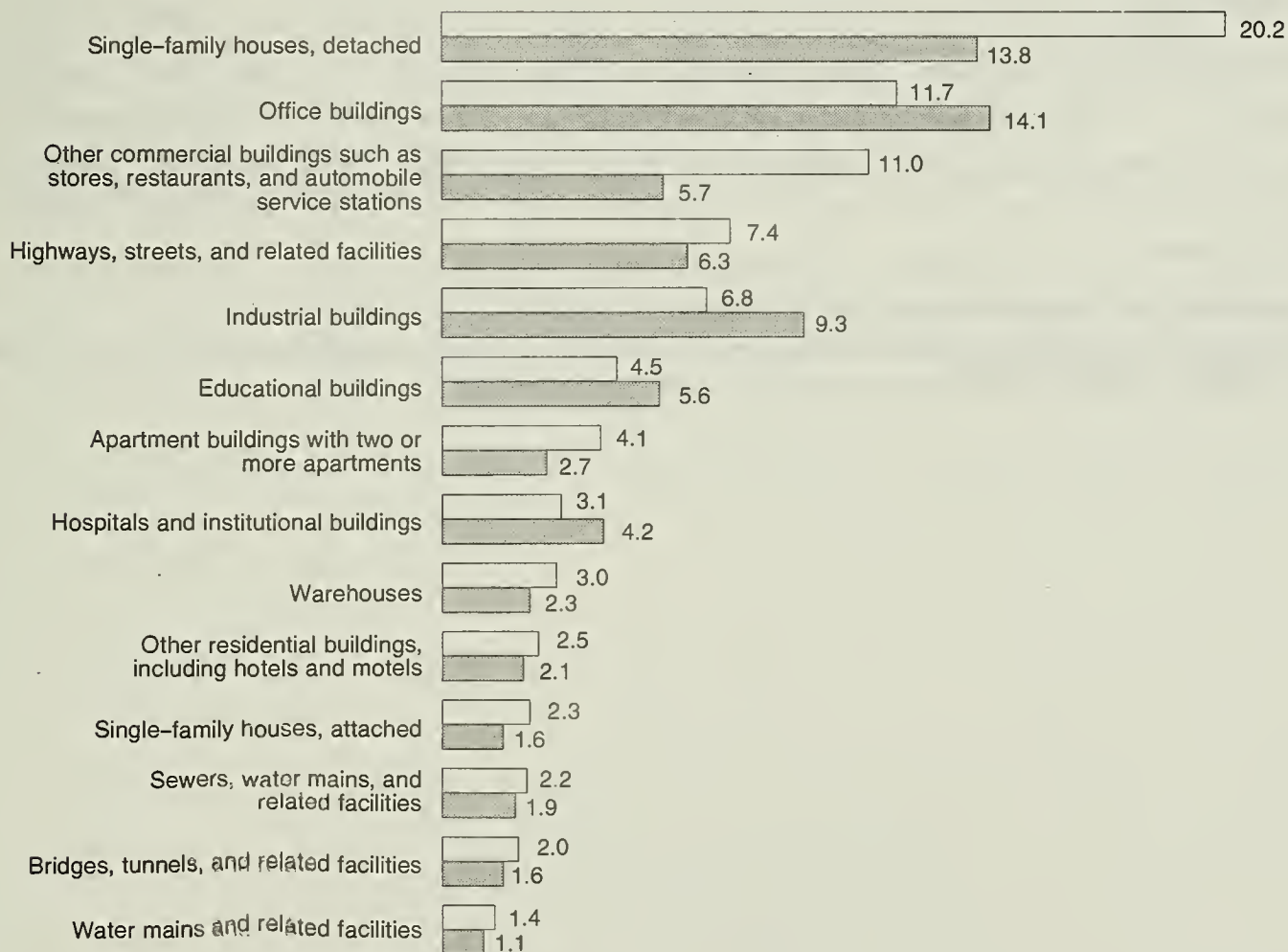


Figure 2. **Value of Construction Work by Type of Construction**  
(Percent)

1987  
1982





**Table 1. Summary Statistics for Establishments With and Without Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	All establishments				Establishments without payroll			Establishments with payroll				Relative standard error of estimate (percent) for column—	
			Proprie- tors and working partners	All em- ployees**	Dollar value of business done		Proprie- tors and working partners	Dollar value of business done		Proprie- tors and working partners	All em- ployees**	Dollar value of business done¹		
		A	B	C	D	E	F	G	H	I	J	K	J	K
15, 16, 17	1987													
	Construction Industries and land subdividers and developers -----	35 091	26 496	85 585	10 740 896	22 673	22 778	1 265 783	12 418	3 718	85 585	9 475 113	1	1
	Construction Industries -----	33 945	25 298	84 898	10 421 097	21 712	21 615	1 050 849	12 233	3 683	84 898	9 370 248	1	1
	Building construction—General contractors and operative bulders ----	10 785	7 250	25 307	4 661 988	6 372	6 056	525 337	4 413	1 194	25 307	4 136 651	2	2
	Heavy construction other than building construction— contractors-----	1 315	572	13 553	1 828 510	385	380	26 339	930	192	13 553	1 802 171	3	2
	Special trade contractors -----	21 845	17 476	46 038	3 930 599	14 955	15 179	499 173	6 890	2 297	46 038	3 431 428	1	1
	Plumbing, heating, and air-conditioning --	2 081	1 308	8 404	830 700	984	968	48 749	1 097	340	8 404	781 951	2	2
	Electrical work-----	1 786	1 076	8 564	696 962	874	868	43 923	912	208	8 564	653 039	2	2
	Land subdividers and developers, n.e.c.²-----	1 135	1 191	674	319 787	961	1 163	214 934	174	28	674	104 853	16	15
	1982													
15, 16, 17	Construction Industries and land subdividers and developers -----	28 999	22 803	77 690	7 696 606	18 512	18 972	686 565	10 487	3 831	77 690	7 010 041	1	1
	Construction Industries -----	28 263	22 042	77 281	7 595 525	17 925	18 222	612 730	10 338	3 820	77 281	6 982 795	1	1
	Building construction—General contractors and operative bulders ----	9 249	6 991	21 628	3 011 242	5 677	5 740	307 457	3 572	1 251	21 628	2 703 785	2	1
	Heavy construction other than building construction— contractors-----	1 660	1 080	16 356	1 762 621	943	942	30 604	717	138	16 356	1 732 017	1	1
	Special trade contractors -----	17 354	13 971	39 297	2 821 662	11 305	11 540	274 669	6 049	2 431	39 297	2 546 993	1	1
	Plumbing, heating, and air-conditioning --	1 678	1 012	7 245	635 148	756	760	28 384	922	252	7 245	606 764	2	1
	Electrical work-----	1 509	963	9 251	731 339	733	741	25 787	776	222	9 251	705 552	3	1
	Land subdividers and developers, n.e.c.²-----	727	757	400	101 071	587	750	73 835	140	7	400	27 236	11	12

Note: Number of establishments in this and subsequent tables represent those in business at any time during the year.

<sup>1</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.

<sup>2</sup>For establishments without payroll, may also include data for an unknown number of cemetery subdividers and developers.

**Table 2. Summary Statistics by Size Class of Dollar Value of Business Done for Establishments With and Without Payroll : 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Receipts size	All establishments				Establishments without payroll <sup>1</sup>			Establishments with payroll				Relative standard error of estimate (percent) for column —	
	Number	Proprietors and working partners	All employees**	Dollar value of business done	Number	Proprietors and working partners	Dollar value of business done	Number	Proprietors and working partners	All employees**	Dollar value of business done <sup>2</sup>		
	A	B	C	D	E	F	G	H	I	J	K	J	K
<b>1987</b>													
The State -----	35 091	26 496	85 585	10 740 896	22 673	22 778	1 265 783	12 418	3 718	85 585	9 475 113	1	1
\$10,000,000 or more -----	134	3	15 320	(D)	1	1	(D)	133	2	15 320	3 054 843	(W)	1
\$5,000,000 to \$9,999,999 -----	155	22	7 074	4 169 442	6	7	87 444	149	15	7 074	1 027 155	1	3
\$2,500,000 to \$4,999,999 -----	392	38	11 142	1 376 812	12	20	40 442	380	18	11 142	1 336 370	3	4
\$1,000,000 to \$2,499,999 -----	1 070	159	13 994	1 621 860	66	72	94 097	1 004	87	13 994	1 527 763	3	4
\$500,000 to \$999,999 -----	1 621	528	11 841	1 129 293	215	210	148 029	1 406	318	11 841	981 264	4	4
 \$250,000 to \$499,999 -----	2 807	1 246	11 835	1 000 319	582	529	199 886	2 225	717	11 835	800 433	5	4
\$100,000 to \$249,999 -----	(S)	(S)	(S)	(S)	1 759	1 780	269 295	(S)	(S)	(S)	(S)	(S)	(S)
\$50,000 to \$99,999 -----	(S)	(S)	(S)	(S)	2 638	2 707	185 701	(S)	(S)	(S)	(S)	(S)	(S)
\$25,000 to \$49,999 -----	(S)	(S)	(S)	(S)	3 552	3 575	126 737	(S)	(S)	(S)	(S)	(S)	(S)
 Less than \$25,000 -----	(S)	(S)	(S)	(S)	13 842	13 877	114 150	(S)	(S)	(S)	(S)	(S)	(S)
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	4 825	4 828	79 952	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	2 953	2 978	21 405	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,000 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	2 240	2 248	8 148	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,000 -----	(NA)	(NA)	(NA)	(NA)	3 824	3 823	4 645	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>1982</b>													
The State -----	28 999	22 803	77 690	7 696 606	18 512	18 972	686 565	10 487	3 831	77 690	7 010 041	1	1
\$10,000,000 or more -----	102	26	21 149	(D)	1	—	(D)	101	26	21 149	2 956 739	(W)	(W)
\$5,000,000 to \$9,999,999 -----	121	14	6 940	3 798 664	3	4	31 902	118	10	6 940	810 023	(W)	(W)
\$2,500,000 to \$4,999,999 -----	220	20	6 963	760 433	8	8	46 732	212	12	6 963	733 543	(W)	(W)
\$1,000,000 to \$2,499,999 -----	616	65	10 714	955 183	26	34	39 206	590	31	10 714	915 977	2	3
\$500,000 to \$999,999 -----	877	198	7 919	600 273	74	82	51 032	803	116	7 919	549 241	4	4
 \$250,000 to \$499,999 -----	1 589	587	8 225	555 023	229	228	78 281	1 360	359	8 225	476 742	4	4
\$100,000 to \$249,999 -----	3 354	2 058	8 076	522 873	992	1 075	148 278	2 362	983	8 076	374 595	4	4
\$50,000 to \$99,999 -----	3 428	2 664	3 516	243 506	1 737	1 862	120 329	1 691	802	3 516	123 177	6	4
\$25,000 to \$49,999 -----	4 017	3 381	2 010	141 651	2 710	2 815	94 309	1 307	566	2 010	47 342	7	5
 Less than \$25,000 -----	14 673	13 788	2 176	118 998	12 732	12 864	96 338	1 941	924	2 176	22 660	4	4
\$10,000 to \$24,999 -----	(NA)	(NA)	(NA)	(NA)	4 078	4 169	65 205	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$5,000 to \$9,999 -----	(NA)	(NA)	(NA)	(NA)	2 876	2 884	19 514	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
\$2,500 to \$4,999 -----	(NA)	(NA)	(NA)	(NA)	3 169	3 176	9 010	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Less than \$2,500 -----	(NA)	(NA)	(NA)	(NA)	2 609	2 635	2 609	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

Note: Underscored data fields include data from adjoining lines which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>For establishments without payroll, may include data for an unknown number of cemetery subdividers and developers.

<sup>2</sup>For establishments with payroll in 1987, the dollar value of business done includes the value of construction work which has a measure of construction activity where no receipts were received. In earlier censuses, construction receipts only were collected.



**Table 3. General Statistics for Establishments With Payroll by Industry: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	1987							
		Number of establish- ments	Employees**		Payroll		Construction worker hours (thousands)	Value of construction work	Net value of construction work†
			All	Construction workers	All employees	Construction workers			
		A	B	C	D	E	F	G	H
	<b>Construction Industries and land subdividers and developers</b> .....	<b>12 418</b>	<b>85 585</b>	<b>66 707</b>	<b>1 948 713</b>	<b>1 407 909</b>	<b>103 843</b>	<b>9 149 222</b>	<b>6 693 759</b>
15, 16, 17	<b>Construction industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses .....	2 595	8 318	6 571	122 939	91 721	8 163	753 601	517 739
1522	Other residential buildings .....	228	1 586	1 208	29 770	20 726	1 651	258 313	136 693
1531	Operative builders .....	460	2 476	1 268	52 536	20 080	2 185	600 398	317 183
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses .....	144	1 878	1 370	50 627	32 633	2 291	329 949	163 555
1542	Nonresidential buildings, n.e.c. ....	986	11 049	8 361	279 459	196 794	13 749	2 041 106	953 793
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction .....	226	4 599	3 705	138 944	100 638	6 457	603 218	484 293
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction .....	27	827	680	19 330	13 903	1 242	126 006	84 144
1623	Water, sewer, and utility lines .....	275	3 143	2 578	81 804	61 573	4 334	355 794	301 863
1629	Heavy construction, n.e.c. ....	402	4 984	4 006	158 091	110 008	7 323	672 952	572 612
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning .....	1 097	8 404	6 219	211 658	154 341	10 429	756 797	671 183
1721	Painting and paper hanging .....	609	3 023	2 476	54 975	42 621	3 840	156 752	147 713
1731	Electrical work .....	912	8 564	6 596	223 476	163 396	10 976	638 499	617 769
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework .....	338	1 300	1 138	26 656	21 392	1 637	95 384	90 912
1742	Plastering, drywall, and insulation work .....	547	5 785	4 889	120 145	95 351	6 496	337 577	317 244
1743	Terrazzo, tile, marble, and mosaic work .....	83	388	295	8 427	6 296	457	37 573	33 628
175	Carpentry and floor work:								
1751	Carpentry .....	694	2 501	2 062	41 655	30 779	2 622	143 591	129 241
1752	Floor laying and other floor work .....	267	1 045	818	18 748	13 583	1 051	74 921	69 503
1761	Roofing, siding, and sheet metal work .....	616	4 480	3 651	83 454	63 552	5 448	323 387	305 621
1771	Concrete work .....	553	3 348	2 857	58 447	45 034	4 229	224 176	212 386
1781	Water well drilling .....	88	365	284	8 027	5 948	467	36 127	35 658
179	Miscellaneous special trade contractors:								
1791	Structural steel erection .....	60	975	799	25 136	20 367	1 376	81 263	75 927
1793	Glass and glazing work .....	184	1 022	704	19 738	13 263	1 051	75 468	74 359
1794	Excavation work .....	278	1 519	1 267	36 328	29 139	2 158	137 725	127 733
1795	Wrecking and demolition work .....	22	262	196	5 881	3 939	217	19 033	18 110
1796	Installing building equipment, n.e.c. ....	88	716	576	22 555	17 383	1 068	66 422	63 209
1799	Special trade contractors, n.e.c. ....	454	2 341	1 887	38 428	29 621	2 580	135 274	128 265
6552	<b>Land subdividers and developers, n.e.c.</b> .....	<b>174</b>	<b>674</b>	<b>224</b>	<b>11 467</b>	<b>3 818</b>	<b>333</b>	<b>67 904</b>	<b>43 412</b>

†In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

1987—Con.						1982			Relative standard error of estimate (percent) for column—			1987 SIC code
Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub-contracted to others	Rental cost of machinery, equipment, and buildings	Capital expenditures, other than land	End-of-year gross book value of depreciable assets	All employees**	Total construction receipts¹	Value added††				
I	J	K	L	M	N	O	P	Q	B	H	M	
4 197 508	2 698 214	2 455 463	163 724	132 103	1 146 463	77 690	6 834 101	3 396 250	1	1	3	15, 16, 17
												15
285 585 79 291	244 759 63 858	235 862 121 620	5 623 1 937	7 542 1 723	56 968 *31 381	7 198 561	507 511 78 122	215 374 17 815	4 9	4 8	12 24	152 1521 1522
159 547	164 664	283 215	3 379	4 117	61 770	2 353	309 814	144 659	6	7	18	1531
97 038 606 002	72 943 376 269	166 393 1 087 312	4 254 17 442	1 420 8 036	20 745 96 915	2 233 9 283	293 383 1 440 864	82 364 344 806	5 3	6 2	15 7	154 1541 1542
												16
339 452	173 775	118 925	26 155	17 588	187 095	4 212	389 952	205 761	3	2	7	1611
49 229 196 174 367 384	36 383 110 800 213 915	41 862 53 930 100 339	1 540 14 476 21 099	4 098 12 033 21 451	15 465 106 282 151 755	1 137 3 150 7 857	111 758 228 019 972 283	53 326 125 730 692 973	25 4 6	12 3 5	29 10 9	162 1622 1623 1629
												17
417 152	279 184	85 614	11 326	9 106	71 505	7 245	586 535	303 615	2	3	11	1711
115 693	34 880	9 039	2 926	3 773	24 586	1 911	75 133	54 293	6	5	22	1721
374 240	258 069	20 729	11 336	8 879	64 132	9 251	696 125	444 937	2	2	10	1731
53 232 206 674 18 875	37 880 123 345 (D)	4 471 20 333 (S)	1 298 4 891 366	1 162 4 299 134	9 427 25 186 2 028	1 236 4 197 410	48 465 228 258 18 439	27 976 147 464 9 353	7 4 16	7 3 18	28 10 11	174 1741 1742 1743
85 452 37 435	48 559 34 243	14 350 5 417	1 411 1 308	1 672 980	11 237 6 003	2 068 756	74 868 43 873	36 311 23 178	6 13	6 10	21 22	175 1751 1752
179 254	130 357	17 766	5 200	3 621	34 691	3 254	215 688	135 648	5	4	16	1761
142 499	72 117	11 790	6 131	3 700	32 250	2 264	112 207	69 008	6	5	16	1771
22 904	13 116	468	700	1 168	15 568	334	19 374	11 782	9	9	33	1781
50 030 38 252 95 382 16 030 41 416 88 358	(D) 42 408 34 865 (D) 25 002 47 446	5 335 1 109 9 991 923 3 213 7 008	2 600 1 595 11 689 1 107 935 2 175	660 539 8 978 1 145 434 2 938	5 670 6 282 54 702 8 856 5 607 17 690	772 665 2 291 166 770 1 707	46 172 44 127 142 084 8 105 61 852 65 011	36 059 25 220 89 554 7 349 42 783 38 836	8 9 7 16 7 8	5 9 7 3 2 7	36 35 20 6 28 24	179 1791 1793 1794 1795 1796 1799
34 919	13 804	24 492	812	*894	*22 657	400	16 070	10 065	16	16	69	6552



**Table 4. Detailed Statistics for Establishments With Payroll: 1987 and Earlier Census Years**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	1977	1972	Relative standard error of estimate (percent)			
					1987	1982	1977	1972
Number of establishments in business during year .....	12 418	10 487	11 379	8 195	1	2	2	3
Proprietors and working partners .....	3 718	3 831	7 188	5 429	4	4	4	4
All employees** .....	85 585	77 690	84 829	61 863	1	1	1	2
Construction workers:								
March .....	60 998	58 533	61 633	43 156	1	1	1	2
May .....	65 747	60 912	72 712	50 937	1	1	1	2
August .....	72 856	63 606	79 011	60 228	1	1	1	2
November .....	67 229	56 809	74 313	51 557	1	1	1	2
Average .....	66 707	61 087	71 978	52 347	1	1	1	2
Other employees:								
March .....	18 309	16 450	12 522	9 178	1	1	1	2
May .....	18 581	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
August .....	19 136	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
November .....	19 484	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Average .....	18 877	(NA)	(NA)	(NA)	1	(NA)	(NA)	(NA)
Construction worker hours (thousands):								
January to March .....	22 685	21 856	(NA)	(NA)	1	1	(NA)	(NA)
April to June .....	25 975	22 832	(NA)	(NA)	1	1	(NA)	(NA)
July to September .....	28 770	23 818	(NA)	(NA)	1	1	(NA)	(NA)
October to December .....	26 412	20 941	(NA)	(NA)	1	1	(NA)	(NA)
Total hours worked .....	103 843	89 448	(NA)	(NA)	1	1	(NA)	(NA)
Payroll, all employees .....	1 948 713	1 703 642	1 214 643	646 844	1	1	1	2
Payroll, construction workers .....	1 407 909	1 315 192	993 098	535 553	1	1	1	2
Payroll, other employees .....	540 803	388 449	221 545	111 291	1	1	1	2
First quarter payroll, all employees .....	428 157	416 192	256 043	(NA)	1	1	1	(NA)
Employer costs for fringe benefits, all employees .....	467 915	317 295	261 295	(NA)	1	1	1	(NA)
Legally required expenditures .....	323 399	249 769	151 825	(NA)	1	1	1	(NA)
Voluntary expenditures .....	144 515	67 525	109 470	(NA)	1	1	(W)	(NA)
Dollar value of business done .....	9 475 113	7 010 041	5 200 680	2 534 313	1	1	1	2
Value of construction work <sup>1</sup> .....	9 149 222	6 834 101	4 961 221	2 449 475	1	1	1	2
Value of construction work subcontracted in from others .....	2 227 684	1 452 953	1 234 436	479 891	2	1	1	3
Land receipts <sup>2</sup> .....	123 926	51 249	(NA)	(NA)	8	4	(NA)	(NA)
Other business receipts .....	201 964	124 690	239 458	84 838	4	2	2	3
Net value of construction† .....	6 693 759	5 239 452	3 884 778	1 831 582	1	1	1	2
Value added†† .....	4 197 508	3 396 250	2 304 719	1 150 496	1	1	1	2
Selected costs .....	5 153 677	3 562 541	2 803 760	1 355 070	1	1	1	2
Materials, components, and supplies <sup>3</sup> .....	2 555 229	1 854 343	1 643 648	737 177	1	1	1	2
Construction work subcontracted to others .....	2 455 463	1 594 648	1 076 443	617 893	2	1	1	3
Selected power, fuels, and lubricants .....	142 985	113 548	83 669	(NA)	1	1	1	(NA)
Electricity .....	19 230	17 088	8 485	(NA)	2	2	2	(NA)
Natural gas .....	4 136	3 371	4 254	(NA)	4	2	3	(NA)
Gasoline and diesel fuel .....	110 533	85 739	58 546	(NA)	2	2	1	(NA)
On highway use .....	78 827	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Off highway use .....	31 705	(NA)	(NA)	(NA)	2	(NA)	(NA)	(NA)
Other, including lubricating oils and greases .....	9 085	7 349	12 388	(NA)	3	2	2	(NA)
Rental cost for machinery, equipment, and buildings .....	163 724	100 001	75 814	(NA)	2	1	1	(NA)
For machinery and equipment .....	116 310	74 302	64 458	40 205	2	1	1	2
For buildings .....	47 414	25 699	11 356	(NA)	3	2	2	(NA)
Selected purchased services .....	148 712	110 243	95 712	(NA)	2	1	1	(NA)
Communication services .....	40 749	26 570	19 058	(NA)	2	2	3	(NA)
Repairs to buildings and other structures .....	6 556	4 609	4 311	(NA)	5	4	4	(NA)
Repairs to machinery and equipment .....	101 406	79 063	72 343	(NA)	2	1	1	(NA)
Ownership of construction projects:								
Value of construction work .....	9 149 222	6 834 101	4 961 221	2 449 475	1	1	1	2
Government owned .....	2 413 716	2 031 561	1 375 026	1 035 675	2	1	1	2
Federal .....	706 906	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
State and local .....	1 706 810	(NA)	(NA)	(NA)	3	(NA)	(NA)	(NA)
Privately owned .....	6 735 505	4 802 539	3 586 196	1 413 800	1	1	1	3

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>Data were collected separately for establishments classified in SIC 1531, Operative Builders and SIC 6552, Land Subdividers and Developers, Except Cemeteries. For all other industries, data are included in other business receipts.

<sup>3</sup>For 1972, includes data for power, fuels, and lubricants.

**Table 5. Assets, Capital Expenditures, and Depreciation for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	1987	1982	Relative standard error of estimate (percent)	
			1987	1982
<b>BUILDINGS AND OTHER STRUCTURES, MACHINERY, AND EQUIPMENT</b>				
Beginning-of-year gross book value of depreciable assets -----	1 063 253	1 174 607	3	2
Capital expenditures, other than land -----	132 103	101 177	3	2
New -----	85 551	66 796	3	1
Used -----	46 551	34 380	5	4
Retirements and disposition of depreciable assets -----	48 892	74 358	6	1
End-of-year gross book value of depreciable assets -----	1 146 463	1 201 425	3	2
Depreciation charges during year -----	136 471	146 578	2	2
<b>Buildings and Other Structures, Additions, and Related Facilities</b>				
Beginning-of-year gross book value of depreciable assets -----	194 926	177 778	10	3
Capital expenditures, other than land -----	14 082	11 900	9	5
New buildings and other structures -----	9 044	9 146	8	3
Used buildings and other structures -----	5 038	2 753	19	20
Retirements and disposition of depreciable assets -----	8 087	10 873	28	4
End-of-year gross book value of depreciable assets -----	200 921	178 804	9	3
Depreciation charges during year -----	13 976	16 272	5	5
<b>Machinery and Equipment</b>				
Beginning-of-year gross book value of depreciable assets -----	868 327	996 828	3	2
Capital expenditures, other than land -----	118 020	89 277	3	2
New machinery and equipment, including automobiles and trucks -----	76 506	57 650	4	2
New automobiles and trucks, intended primarily for highway use -----	40 520	19 727	5	4
Used machinery and equipment, including automobiles and trucks -----	41 513	31 627	5	3
Retirements and disposition of depreciable assets -----	40 805	63 485	4	1
End-of-year gross book value of depreciable assets -----	945 542	1 022 621	3	2
Depreciation charges during year -----	122 495	130 306	2	2

**Table 6. Value of Inventories for Establishments With Payroll: 1987 and 1986**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Item	Establishments with payroll	Relative standard error of estimate (percent)
<b>All establishments:</b>		
Number .....	12 418	1
Value of construction work .....	9 149 222	1
<b>Establishments with inventories:</b>		
Number .....	4 527	3
Value of construction work .....	4 149 927	2
<b>Inventories<sup>1</sup>:</b>		
End of 1987, materials and supplies .....	102 025	6
End of 1986, materials and supplies .....	88 832	5
<b>Establishments with no inventories:</b>		
Number .....	5 856	3
Value of construction work .....	3 388 328	2
<b>Establishments not reporting:</b>		
Number .....	2 035	5
Value of construction work .....	1 610 967	3

<sup>1</sup>Inventories at cost or market prior to any adjustment to correct to LIFO values.



**Table 7. Selected Statistics for Establishments With Payroll by Employment Size Class: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with an average of—									1,000 employees or more
		1 to 4 employees	5 to 9 employees	10 to 19 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees		
<b>1987</b>											
Number of establishments .....	12 418	(S)	2 323	1 199	602	139	51	14	2	—	
All employees** .....	85 585	(S)	14 829	15 808	17 615	9 362	7 395	5 378	(D)	—	
Payroll, all employees .....	1 948 713	(S)	262 788	346 434	455 754	274 752	223 670	165 547	(D)	—	
Construction worker hours (thousands) .....	103 843	(S)	14 873	18 770	22 706	12 467	10 386	7 539	(D)	—	
Dollar value business done .....	9 475 113	(S)	1 195 834	1 541 351	2 056 671	1 269 478	1 039 850	849 114	(D)	—	
Value of construction work <sup>1</sup> .....	9 149 222	(S)	1 147 967	1 483 960	1 983 987	1 227 921	1 858 925	(D)	(D)	—	
Net value of construction work† .....	6 693 759	(S)	897 793	1 130 124	1 457 388	831 762	712 573	582 932	(D)	—	
Value added†† .....	4 197 508	(S)	544 632	722 196	940 684	997 491	(D)	339 105	(D)	—	
Cost of materials, components, supplies, and fuels .....	2 698 214	(S)	380 290	448 191	564 392	339 744	505 077	(D)	(D)	—	
Cost of construction work subcontracted to others .....	2 455 463	(S)	250 174	353 835	526 599	396 159	563 420	(D)	(D)	—	
Rental cost for machinery, equipment, and buildings .....	163 724	(S)	23 978	27 074	35 534	19 846	24 724	14 984	(D)	—	
Capital expenditures, other than land .....	132 103	(S)	23 213	24 529	28 904	12 551	19 650	1 116	(D)	—	
End-of-year gross book value of depreciable assets .....	1 146 463	(S)	156 122	229 533	239 253	127 362	186 748	12 535	(D)	—	
<b>1982</b>											
All employees** .....	77 690	13 232	10 731	11 313	13 443	7 172	9 210	5 725	6 864	(D)	
Value of construction work <sup>1</sup> .....	6 834 101	723 273	691 923	806 996	1 275 570	814 825	1 051 433	628 881	841 199	(D)	
Value added†† .....	3 396 250	341 094	354 696	402 969	595 365	369 384	486 961	252 716	593 065	(D)	
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** .....	1	(S)	4	3	3	1	(W)	(W)	(D)	—	
Net value of construction work† .....	1	(S)	4	3	2	(W)	(W)	(W)	(D)	—	
Capital expenditures, other than land .....	3	(S)	12	7	7	1	(W)	(W)	(D)	—	

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

**Table 8. Selected Statistics by Size Class of Dollar Value of Business Done for Establishments With Payroll: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Selected statistics	Total	Establishments with dollar value of business done—									
		Less than \$25,000	\$25,000 to \$49,999	\$50,000 to \$99,999	\$100,000 to \$249,999	\$250,000 to \$499,999	\$500,000 to \$999,999	\$1,000,000 to \$2,499,999	\$2,500,000 to \$4,999,999	\$5,000,000 to \$9,999,999	\$10,000,000 or more
<b>1987</b>											
Number of establishments -----	12 418	(S)	(S)	(S)	(S)	2 225	1 406	1 004	380	149	133
All employees** -----	85 585	(S)	(S)	(S)	(S)	11 835	11 841	13 994	11 142	7 074	15 320
Payroll, all employees -----	1 948 713	(S)	(S)	(S)	(S)	196 025	225 261	334 751	294 713	213 962	511 796
Construction worker hours (thousands) -----	103 843	(S)	(S)	(S)	(S)	13 333	13 143	16 976	14 003	9 731	21 957
Dollar value of business done -----	9 475 113	(S)	(S)	(S)	(S)	800 433	981 264	1 527 763	1 336 370	1 027 155	3 054 843
Value of construction work <sup>1</sup> -----	9 149 222	(S)	(S)	(S)	(S)	777 170	944 189	1 443 346	1 302 196	989 523	2 965 364
Net value of construction work† -----	6 693 759	(S)	(S)	(S)	(S)	657 141	761 919	1 088 860	988 446	697 741	1 853 209
Value added†† -----	4 197 508	(S)	(S)	(S)	(S)	400 762	462 509	702 021	629 192	431 253	1 169 517
Cost of materials, components, supplies, and fuels -----	2 698 214	(S)	(S)	(S)	(S)	273 126	320 741	437 887	382 982	284 264	739 594
Cost of construction work subcontracted to others -----	2 455 463	(S)	(S)	(S)	(S)	120 028	182 269	354 485	313 749	291 782	1 112 155
Rental cost for machinery, equipment, and buildings -----	163 724	(S)	(S)	(S)	(S)	15 707	16 562	24 821	22 221	22 138	49 584
Capital expenditures, other than land -----	132 103	(S)	(S)	(S)	(S)	15 065	19 717	23 597	17 224	10 563	29 479
End-of-year gross book value of depreciable assets -----	1 146 463	(S)	(S)	(S)	(S)	118 718	124 520	211 129	177 896	77 349	308 860
<b>1982</b>											
All employees** -----	77 690	2 176	2 010	3 516	8 076	8 225	7 919	10 714	6 963	6 940	21 149
Value of construction work <sup>1</sup> -----	6 834 101	22 008	46 718	120 563	364 828	460 116	533 361	880 260	708 324	782 721	2 915 198
Value added†† -----	3 396 250	11 155	24 080	63 269	192 215	236 447	274 748	441 630	350 135	365 079	1 437 488
<b>1987 RELATIVE STANDARD ERROR OF ESTIMATE (PERCENT)</b>											
All employees** -----	1	(S)	(S)	(S)	(S)	5	4	3	3	1	(W)
Net value of construction work† -----	1	(S)	(S)	(S)	(S)	4	4	3	4	2	(W)
Capital expenditures, other than land -----	3	(S)	(S)	(S)	(S)	12	11	9	11	7	(W)

Note: Underscored data fields include data from adjoining columns which have been withheld to avoid disclosing data for individual companies.

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.



**Table 9. Value of Construction Work for Establishments With Payroll by Type of Construction: 1987 and 1982**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

Type of construction	Value of construction work <sup>1</sup>				Relative standard error of estimate (percent) for column—			
	Total	New construction	Additions, alterations, or reconstruction <sup>2</sup>	Maintenance and repair	A	B	C	D
	A	B	C	D	A	B	C	D
<b>1987</b>								
Value of construction work <sup>1</sup> .....	9 149 222	6 067 172	1 890 244	770 161	1	1	2	2
<b>Building construction</b> .....	6 637 290	4 593 530	1 458 905	542 455	1	1	3	3
Single-family houses.....	2 054 955	1 536 299	364 115	154 540	3	3	4	6
Single-family houses, detached.....	1 843 661	1 377 134	329 254	137 271	3	4	5	6
Single-family houses, attached.....	211 294	159 165	34 861	17 269	9	11	16	12
Apartment buildings with two or more apartments.....	373 861	291 996	36 313	45 551	4	5	10	5
Other residential buildings, including hotels and motels.....	226 368	147 304	59 455	19 608	4	5	10	9
Hotels and motels.....	120 691	82 768	27 355	10 567	3	4	3	7
Other residential buildings, excluding hotels and motels.....	105 677	64 536	32 100	9 041	8	10	18	16
Office buildings.....	1 067 848	764 046	233 323	70 478	2	1	4	5
Other commercial buildings such as stores, restaurants, and automobile service stations.....	1 003 229	692 249	232 227	78 752	3	3	6	5
Industrial buildings and warehouses.....	898 447	593 300	207 217	97 929	3	3	9	3
Industrial buildings.....	619 414	361 492	176 033	81 888	4	4	11	3
Warehouses.....	279 033	231 808	31 184	16 041	3	3	5	7
Religious buildings.....	66 770	37 275	21 843	7 651	9	15	10	8
Educational buildings.....	408 271	231 258	152 486	24 526	5	5	8	12
Hospitals and institutional buildings.....	285 685	171 334	96 055	18 295	3	3	4	10
Farm buildings.....	16 394	10 449	4 240	1 705	22	27	30	21
Amusement, social, and recreational buildings.....	55 027	36 567	13 831	4 628	5	5	15	5
Other nonresidential buildings.....	138 028	81 449	37 793	18 786	6	2	19	4
Land development for buildings.....	42 401	(NA)	(NA)	(NA)	19	(NA)	(NA)	(NA)
<b>Nonbuilding construction</b> .....	2 132 689	1 473 642	431 339	227 706	2	2	2	3
Highways, streets, and related facilities.....	673 076	413 302	200 253	59 519	2	2	3	6
Outdoor swimming pools.....	7 775	6 247	*278	(S)	30	31	47	(S)
Parking areas including private driveways.....	54 207	36 921	8 254	9 031	9	9	19	21
Fencing.....	26 314	21 460	3 069	1 784	25	26	40	25
Recreational facilities such as athletic fields, golf courses, and outdoor tennis courts.....	*57 656	*46 265	*6 147	*5 243	42	44	60	56
Bridges, tunnels, and elevated highways.....	181 987	148 317	26 098	7 571	8	10	8	14
Tunnels.....	42 009	37 152	(D)	(D)	1	1	(D)	(D)
Bridges and elevated highways.....	139 978	111 165	(D)	(D)	11	14	(D)	(D)
Dam and reservoir construction.....	48 863	44 176	2 295	2 391	4	3	16	8
Marine construction.....	38 553	17 115	6 590	14 847	4	1	4	10
Harbor and port facilities.....	41 412	25 935	6 792	8 684	3	3	4	3
Conservation and development construction.....	12 244	10 003	1 444	*796	23	25	6	56
Power and communication transmission lines, towers, and related facilities.....	110 226	78 344	23 230	8 651	3	3	3	11
Sewers, water mains, and related facilities.....	328 005	261 225	49 468	17 311	4	4	6	11
Sewers, sewer lines, and related facilities.....	197 450	158 345	28 789	10 316	3	4	4	14
Water mains and related facilities.....	130 555	102 880	20 679	6 995	6	5	12	13
Pipeline, other than sewer or water lines.....	28 529	19 807	5 869	2 852	14	16	14	16
Mass transit construction.....	20 035	*13 143	2 493	4 398	27	41	22	6
Blast furnaces, petroleum refineries, and chemical complexes.....	103 938	16 724	44 329	42 885	1	3	1	1
Power plants.....	119 940	105 872	7 872	6 195	1	(W)	6	12
Power plants, nuclear.....	6 430	4 235	1 551	643	3	1	9	7
Power plants, except nuclear.....	113 509	101 636	6 320	5 551	1	(W)	7	14
Sewage treatment and water treatment plants.....	98 888	79 108	15 877	3 902	3	4	3	7
Sewage treatment plants.....	75 641	59 472	14 202	1 966	4	5	3	5
Water treatment plants.....	23 247	19 636	1 675	1 936	3	3	11	12
Earthmoving, nonbuilding.....	52 773	42 086	*6 558	*4 127	37	34	46	57
Other nonbuilding construction.....	128 268	87 592	14 423	26 270	9	10	17	17
<b>Construction work, n.s.k.</b> .....	379 243	(NA)	(NA)	(NA)	4	(NA)	(NA)	(NA)
<b>1982</b>								
Value of construction work <sup>1</sup> .....	6 834 101	5 909 213	(NA)	924 888	1	1	(NA)	2
<b>Building construction</b> .....	4 361 923	3 769 009	(NA)	592 914	1	1	(NA)	2
Single-family houses.....	1 052 710	864 748	(NA)	187 962	2	2	(NA)	4
Single-family houses, detached.....	941 170	769 276	(NA)	171 893	2	3	(NA)	4
Single-family houses, attached.....	111 540	95 472	(NA)	16 068	4	5	(NA)	14
Apartment buildings with two or more apartments.....	184 211	141 365	(NA)	42 846	5	6	(NA)	4
Other residential buildings, including hotels and motels.....	144 201	130 486	(NA)	13 714	2	2	(NA)	3
Office buildings.....	960 936	863 630	(NA)	97 306	1	1	(NA)	2
Other commercial buildings such as stores, restaurants, and automobile service stations.....	392 770	332 966	(NA)	59 803	3	3	(NA)	3
Industrial buildings and warehouses.....	789 125	679 373	(NA)	109 751	1	1	(NA)	3
Religious buildings.....	38 997	31 876	(NA)	7 120	4	3	(NA)	14
Educational buildings.....	384 045	353 043	(NA)	31 001	2	2	(NA)	7
Hospitals and institutional buildings.....	283 396	260 156	(NA)	23 239	2	1	(NA)	6
Farm buildings.....	23 916	17 784	(NA)	6 131	7	10	(NA)	5
Amusement, social, and recreational buildings.....	49 698	46 815	(NA)	2 882	6	6	(NA)	10
Other nonresidential buildings.....	57 912	46 758	(NA)	11 153	5	5	(NA)	24
<b>Nonbuilding construction</b> .....	2 086 240	1 826 867	(NA)	259 372	1	1	(NA)	2
Highways, streets, and related facilities.....	429 852	328 132	(NA)	101 720	2	2	(NA)	3
Bridges, tunnels, and elevated highways.....	112 248	97 169	(NA)	15 079	1	1	(NA)	(W)
Dam and reservoir construction.....	47 270	44 837	(NA)	2 432	4	4	(NA)	4
Marine construction.....	98 870	66 718	(NA)	32 151	1	1	(NA)	3
Harbor and port facilities.....	21 436	18 390	(NA)	3 046	8	8	(NA)	15
Conservation and development construction.....	19 113	15 367	(NA)	3 746	17	21	(NA)	27
Power and communication transmission lines, towers, and related facilities.....	93 479	75 412	(NA)	18 067	5	6	(NA)	4
Sewers, water mains, and related facilities.....	205 095	186 204	(NA)	18 890	3	3	(NA)	7
Pipeline, other than sewer or water lines.....	30 092	21 952	(NA)	8 139	1	1	(NA)	(W)
Power plants.....	721 205	700 602	(NA)	20 602	(W)	(W)	(NA)	2
Sewage treatment and water treatment plants.....	101 082	95 698	(NA)	5 383	1	(W)	(NA)	4
Other nonbuilding construction.....	206 486	176 374	(NA)	30 106	6	6	(NA)	9
<b>Construction work, n.s.k.</b> .....	385 937	313 336	(NA)	72 600	4	3	(NA)	4

<sup>1</sup>In earlier censuses, construction receipts only were collected. In 1987, the value of construction work was collected to better measure actual construction activity where no receipts were received.

<sup>2</sup>In 1982, data for additions, alterations, or reconstruction were not collected separately. These data are included with "New construction".



**Table 10. Quarterly Construction Worker Hours and Employment With Payroll by Industry:**

[Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see Introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Number of establishments	Average number of construction workers	Construction worker hours (thousands)	January to March		April to June	
					Construction workers <sup>1</sup>	Hours worked (thousands)	Construction workers <sup>1</sup>	Hours worked (thousands)
		A	B	C	D	E	F	G
	<b>Construction Industries and land subdividers and developers -----</b>	<b>12 418</b>	<b>66 707</b>	<b>103 843</b>	<b>60 998</b>	<b>22 685</b>	<b>65 747</b>	<b>25 975</b>
15, 16, 17	<b>Construction Industries:</b>							
15	<b>Building construction—General contractors and operative builders:</b>							
152	General contractors, residential buildings:							
1521	Single-family houses -----	2 595	6 571	8 163	6 124	1 796	6 794	2 126
1522	Other residential buildings -----	228	1 208	1 651	1 285	462	1 188	419
1531	Operative builders -----	460	1 268	2 185	1 215	528	1 243	556
154	General contractors, nonresidential buildings:							
1541	Industrial buildings and warehouses -----	144	1 370	2 291	1 052	461	1 272	516
1542	Nonresidential buildings, n.e.c. -----	986	8 361	13 749	7 495	3 026	7 797	3 309
16	<b>Heavy construction other than building construction—contractors:</b>							
1611	Highway and street construction -----	226	3 705	6 457	2 793	1 100	3 836	1 731
162	Heavy construction, except highway:							
1622	Bridge, tunnel, and elevated highway construction -----	27	680	1 242	494	*271	691	259
1623	Water, sewer, and utility lines -----	275	2 578	4 334	2 134	840	2 461	1 023
1629	Heavy construction, n.e.c. -----	402	4 006	7 323	3 642	1 541	4 060	1 877
17	<b>Special trade contractors:</b>							
1711	Plumbing, heating, and air-conditioning ----	1 097	6 219	10 429	5 889	2 316	6 145	2 677
1721	Painting and paper hanging -----	609	2 476	3 840	1 954	764	2 644	1 014
1731	Electrical work -----	912	6 596	10 976	6 507	2 586	6 552	2 762
174	Masonry, stonework, tile setting, and plastering:							
1741	Masonry, stone setting, and other stonework -----	338	1 138	1 637	941	321	992	354
1742	Plastering, drywall, and insulation work --	547	4 889	6 496	4 887	1 511	4 635	1 540
1743	Terrazzo, tile, marble, and mosaic work --	83	295	457	292	105	270	117
175	Carpentry and floor work:							
1751	Carpentry -----	694	2 062	2 622	1 894	579	2 034	668
1752	Floor laying and other floor work -----	267	818	1 051	754	231	956	304
1761	Roofing, siding, and sheet metal work -----	616	3 651	5 448	3 086	1 127	3 595	1 386
1771	Concrete work -----	553	2 857	4 229	2 779	995	2 857	1 055
1781	Water well drilling -----	88	284	467	271	99	277	121
179	Miscellaneous special trade contractors:							
1791	Structural steel erection -----	60	799	1 376	784	341	754	330
1793	Glass and glazing work -----	184	704	1 051	692	246	675	262
1794	Excavation work -----	278	1 267	2 158	1 199	459	1 274	560
1795	Wrecking and demolition work -----	22	196	217	180	47	157	43
1796	Installing building equipment, n.e.c. -----	88	576	1 068	719	307	513	251
1799	Special trade contractors, n.e.c. -----	454	1 887	2 580	1 673	535	1 812	624
6552	<b>Land subdividers and developers, n.e.c. --</b>	<b>174</b>	<b>224</b>	<b>333</b>	<b>252</b>	<b>81</b>	<b>251</b>	<b>81</b>

<sup>1</sup>Construction workers during pay periods including 12th of March, May, August, and November.

July to September		October to December		Relative standard error of estimate (percent) for column—										1987 SIC code
Construction workers¹	Hours worked (thousands)	Construction workers¹	Hours worked (thousands)											
H	I	J	K	B	C	D	E	F	G	H	I	J	K	
72 856	28 770	67 229	26 412	1	1	1	1	1	1	1	1	1	1	15, 16, 17
														15
7 047 1 239	2 270 386	6 322 1 124	1 970 384	4 9	5 10	4 10	6 12	4 8	5 10	4 10	5 11	5 12	6 11	152 1521 1522
1 314	571	1 301	529	7	9	7	9	7	9	7	10	10	11	1531
														154
1 645 9 107	615 3 821	1 513 9 045	698 3 592	5 3	7 3	6 3	8 4	6 3	7 3	6 3	8 3	4 3	6 3	1541 1542
														16
4 481	2 038	3 710	1 587	3	4	3	4	3	4	3	4	3	5	1611
														162 1622
993 2 898 4 316	*482 1 234 1 991	543 2 818 4 004	229 1 236 1 913	26 4 6	32 4 7	26 4 6	44 5 6	30 4 6	21 5 7	38 4 5	46 5 7	2 4 7	6 5 8	1623 1629
														17
6 555	2 831	6 287	2 603	2	3	2	3	3	3	2	3	3	3	1711
3 021	1 153	2 289	908	6	9	7	10	7	8	7	9	7	10	1721
6 732	2 798	6 594	2 829	2	3	2	3	2	3	3	3	3	3	1731
														174
														1741
1 333 5 149 333	475 1 742 127	1 286 4 887 285	486 1 702 106	7 4 16	8 4 26	8 4 16	11 4 26	7 5 18	9 5 28	9 5 15	10 5 26	8 4 17	9 5 26	1742 1743
														175
2 297 843	705 268	2 024 719	669 247	6 14	8 15	6 11	9 12	7 20	8 26	7 14	8 13	6 12	9 13	1751 1752
4 230	1 580	3 693	1 353	5	5	5	7	5	7	5	6	6	6	1761
3 163	1 204	2 628	974	6	8	11	16	6	8	7	8	6	8	1771
291	128	298	118	11	10	13	15	12	12	9	8	11	10	1781
														179
778 716 1 335 216 532 2 045	356 263 605 62 247 717	882 735 1 260 233 543 2 022	348 279 534 64 262 703	8 9 6 18 9 7	9 13 9 9 14 10	9 9 7 17 17 9	12 14 9 13 19 11	10 9 7 19 10 8	11 13 9 16 12 11	10 10 6 17 9 7	11 13 9 12 12 11	8 10 7 19 9 7	8 14 9 15 13 10	1791 1793 1794 1795 1796 1799
236	89	175	80	25	30	27	31	31	31	26	31	22	36	6552



**Table 11. Selected Industry Ratios for Establishments With Payroll in This State: 1987**

[For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Industry	Average number of employees** per estab- lishment	Payroll per employee (\$1,000)	Construction worker hours per construction worker	Value of construction work per construction worker (\$1,000)	Average per dollar of value of construction work			
						Payroll, all employees	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Rental cost for machinery, equipment, and buildings
	<b>Construction industries and land subdividers and developers</b> -----	6.9	22.8	1 556.7	137.2	.213	.295	.268	.018
15, 16, 17	<b>Construction industries:</b>								
15	<b>Building construction—General contractors and operative builders:</b>								
152	General contractors, residential buildings:								
1521	Single-family houses -----	3.2	14.8	1 242.3	114.7	.163	.325	.313	.007
1522	Other residential buildings -----	7.0	18.8	1 366.7	213.8	.115	.247	.471	.007
1531	Operative builders -----	5.4	21.2	1 723.2	473.5	.088	.274	.472	.006
154	General contractors, nonresidential buildings:								
1541	Industrial buildings and warehouses -----	13.0	27.0	1 672.3	240.8	.153	.221	.504	.013
1542	Nonresidential buildings, n.e.c. -----	11.2	25.3	1 644.4	244.1	.137	.184	.533	.009
16	<b>Heavy construction other than building construction—contractors:</b>								
1611	Highway and street construction -----	20.3	30.2	1 742.8	162.8	.230	.288	.197	.043
162	Heavy construction, except highway:								
1622	Bridge, tunnel, and elevated highway construction -----	30.6	23.4	1 826.5	185.3	.153	.289	.332	.012
1623	Water, sewer, and utility lines -----	11.4	26.0	1 681.1	138.0	.230	.311	.152	.041
1629	Heavy construction, n.e.c. -----	12.4	31.7	1 828.0	168.0	.235	.318	.149	.031
17	<b>Special trade contractors:</b>								
1711	Plumbing, heating, and air-conditioning-----	7.7	25.2	1 677.0	121.7	.280	.369	.113	.015
1721	Painting and paper hanging-----	5.0	18.2	1 550.9	63.3	.351	.223	.058	.019
1731	Electrical work -----	9.4	26.1	1 664.0	96.8	.350	.404	.032	.018
174	Masonry, stonework, tile setting, and plastering:								
1741	Masonry, stone setting, and other stonework -----	3.8	20.5	1 438.5	83.8	.279	.397	.047	.014
1742	Plastering, drywall, and insulation work -----	10.6	20.8	1 328.7	69.0	.356	.365	.060	.014
1743	Terrazzo, tile, marble, and mosaic work -----	4.7	21.7	1 549.2	127.4	.224	(D)	(S)	.010
175	Carpentry and floor work:								
1751	Carpentry -----	3.6	16.7	1 271.6	69.6	.290	.338	.100	.010
1752	Floor laying and other floor work -----	3.9	17.9	1 284.8	91.6	.250	.457	.072	.017
1761	Roofing, siding, and sheet metal work -----	7.3	18.6	1 492.2	88.6	.258	.403	.055	.016
1771	Concrete work -----	6.1	17.5	1 480.2	78.5	.261	.322	.053	.027
1781	Water well drilling -----	4.1	22.0	1 644.4	127.2	.222	.363	.013	.019
179	Miscellaneous special trade contractors:								
1791	Structural steel erection -----	16.3	25.8	1 722.2	101.7	.309	(D)	.066	.032
1793	Glass and glazing work -----	5.6	19.3	1 492.9	107.2	.262	.562	.015	.021
1794	Excavation work -----	5.5	23.9	1 703.2	108.7	.264	.253	.073	.085
1795	Wrecking and demolition work -----	11.9	22.4	1 107.1	97.1	.309	(D)	.048	.058
1796	Installing building equipment, n.e.c. -----	8.1	31.5	1 854.2	115.3	.340	.376	.048	.014
1799	Special trade contractors, n.e.c. -----	5.2	16.4	1 367.2	71.7	.284	.351	.052	.016
6552	<b>Land subdividers and developers, n.e.c.</b> -----	3.9	17.0	1 486.6	303.1	.169	.203	.361	.012

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>PORTLAND-VANCOUVER, OR- WA CMSA</b>											
	Construction industries and land subdividers and developers-----	3 489	25 150	540 609	2 549 523	1 892 527	1 175 234	782 377	656 996	35 472	2	1
	(See appropriate State for SIC detail.)											
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses-----	669	2 181	30 731	204 650	140 264	79 503	66 213	64 386	3 116	10	11
1522	Other residential buildings-----	53	533	9 914	76 436	34 764	16 811	18 187	41 672	234	17	8
1531	Operative builders-----	124	379	8 597	114 369	60 591	28 997	34 239	53 778	*1 590	17	18
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses-----	57	461	10 444	72 522	43 973	25 034	20 085	28 549	314	9	13
1542	Nonresidential buildings, n.e.c.-----	230	2 408	60 728	502 247	208 346	124 832	89 811	293 901	2 315	6	5
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction-----	62	1 354	40 942	214 514	175 726	115 210	70 162	38 788	6 569	6	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines-----	54	938	18 925	71 135	57 582	37 094	21 390	13 553	2 577	6	8
1629	Heavy construction, n.e.c.-----	65	597	14 272	87 686	63 635	39 160	26 219	24 051	1 754	7	7
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning-----	360	3 390	82 293	280 566	251 594	151 078	105 106	28 973	3 463	3	3
1721	Painting and paper hanging-----	239	1 104	17 607	43 705	42 494	33 186	9 324	1 211	443	12	10
1731	Electrical work-----	268	2 675	71 004	209 520	203 183	126 820	86 242	6 337	4 145	3	3
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework-----	98	474	9 776	31 415	30 050	20 148	11 392	1 365	180	10	11
1742	Plastering, drywall, and insulation work-----	135	1 474	26 889	79 445	74 077	50 667	31 739	5 368	945	6	5
1743	Terrazzo, tile, marble, and mosaic work-----	18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork-----	110	588	11 580	57 280	48 874	28 119	24 369	*8 406	511	9	15
1761	Roofing, siding, and sheet metal work-----	167	1 752	29 172	106 884	101 685	57 946	44 556	5 199	943	9	7
1771	Concrete work-----	186	1 015	15 530	51 369	47 211	29 628	17 640	4 159	944	10	9
1781	Water well drilling-----	20	135	2 771	13 427	(D)	7 183	6 128	(D)	178	32	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection-----	23	434	10 516	49 721	(D)	25 361	12 235	(D)	510	5	(D)
1793	Glass and glazing work-----	52	368	7 647	47 515	47 260	21 577	28 547	*255	*323	22	12
1794	Excavation work-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1795	Wrecking and demolition work-----	8	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c.-----	29	369	12 730	38 782	(D)	26 087	11 088	(D)	176	7	(D)
1799	Special trade contractors, n.e.c.-----	135	733	12 605	44 771	41 444	27 827	14 256	3 327	*632	14	15
6552	Land subdividers and developers, n.e.c.-----	55	180	2 574	36 006	28 018	28 519	1 436	7 988	325	33	18
	<b>PORTLAND, OR PMSA</b>											
	Construction industries and land subdividers and developers-----	2 877	21 427	466 928	2 180 293	1 602 830	999 190	654 865	577 462	29 274	2	2
	(See appropriate State for SIC detail.)											



**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>VANCOUVER, WA PMSA</b>											
	Construction industries and land subdividers and developers .....	612	3 723	73 681	369 230	289 697	176 045	127 512	79 533	6 198	3	2
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1522	Other residential buildings .....	3	21	462	1 793	(D)	(D)	206	(D)	(D)	(W)	(D)
1531	Operative builders .....	22	150	2 314	25 090	12 576	(D)	12 173	12 514	*24	32	31
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1542	Nonresidential buildings, n.e.c. ....	36	250	5 744	49 125	21 956	12 901	9 270	27 168	157	16	16
16	Heavy construction other than building construction—contractors:											
1611	Highway and street construction .....	10	453	14 878	(D)	(D)	49 309	(D)	(D)	1 272	4	(D)
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1623	Water, sewer, and utility lines .....	8	74	1 712	5 017	4 650	3 136	(D)	367	(D)	6	6
1629	Heavy construction, n.e.c. ....	*16	140	2 409	8 838	(D)	6 491	2 376	(D)	(D)	16	(D)
17	Special trade contractors:											
1711	Plumbing, heating, and air- conditioning .....	57	309	6 047	24 857	24 080	12 407	11 749	777	271	12	12
1721	Painting and paper hanging .....	31	81	*1 214	2 976	2 902	2 299	606	*74	*94	38	35
1731	Electrical work .....	28	239	6 281	21 418	21 074	11 854	9 710	344	*639	8	7
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	20	116	2 395	7 383	7 309	4 951	*2 358	74	56	35	35
1742	Plastering, drywall, and insulation work .....	36	276	4 712	17 781	15 078	9 610	5 786	*2 703	145	22	14
1743	Terrazzo, tile, marble, and mosaic work .....	-	-	-	-	-	-	-	-	-	-	-
175	Carpentry and floor work:											
1751	Carpentry .....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1752	Floor laying and other floorwork .....	16	107	2 284	8 585	8 440	4 545	4 746	145	123	4	8
1761	Roofing, siding, and sheet metal work .....	27	265	3 827	13 517	13 425	7 697	5 742	*92	*246	24	8
1771	Concrete work .....	48	246	3 183	12 776	11 867	7 182	4 685	*909	*404	23	21
1781	Water well drilling .....	4	66	(D)	8 306	(D)	4 263	(D)	(D)	(D)	(W)	(D)
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	*3	*22	*272	*1 153	*1 139	*925	215	*14	*14	69	69
1793	Glass and glazing work .....	*21	*91	*1 128	*5 210	*5 144	*3 135	*4 113	(S)	(S)	60	57
1794	Excavation work .....	*15	*39	*485	*2 826	*2 743	*1 965	824	83	179	57	64
1795	Wrecking and demolition work .....	1	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
1799	Special trade contractors, n.e.c. ....	*22	*80	*1 308	*3 079	*3 015	*2 332	*683	*64	(S)	50	55
6552	Land subdividers and developers, n.e.c. ....	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	<b>SEATTLE-TACOMA, WA CMSA</b>											
	Construction industries and land subdividers and developers .....	7 011	57 410	1 374 977	6 429 131	4 599 963	2 883 287	1 840 222	1 829 168	84 023	1	1
15,16, 17	Construction Industries:											
	Building construction—General contractors and operative builders:											
152	General contractors, residential buildings:											
1521	Single-family houses .....	1 375	4 657	74 970	445 967	301 080	170 716	137 149	144 887	4 111	5	6
1522	Other residential buildings .....	127	1 121	22 518	208 117	104 207	61 355	44 297	103 910	1 502	9	7
1531	Operative builders .....	337	1 984	43 670	508 992	272 151	139 883	137 047	236 841	2 859	7	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	65	1 035	29 670	221 152	93 253	52 904	(D)	127 899	784	7	9
1542	Nonresidential buildings, n.e.c. ....	537	8 378	219 449	1 568 040	729 207	466 083	(D)	838 833	5 931	3	2

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>SEATTLE-TACOMA, WA CMSA— Con.</b>											
	<b>Construction Industries and land subdividers and developers—Con.</b>											
15,16, 17	<b>Construction Industries—Con.</b>											
	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction .....	91	2 110	68 283	259 772	203 572	140 584	75 344	56 199	10 282	4	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	*21	581	11 512	82 844	59 906	32 923	27 901	22 938	*2 582	36	17
1623	Water, sewer, and utility lines .....	153	2 155	59 145	249 939	212 761	141 525	75 831	37 178	7 922	4	4
1629	Heavy construction, n.e.c. ....	172	3 226	114 478	489 972	412 358	257 086	161 906	77 615	9 893	8	7
17	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning .....	590	5 187	135 499	476 224	412 333	263 902	168 250	63 890	5 144	2	3
1721	Painting and paper hanging .....	354	2 083	40 836	114 808	108 669	85 450	25 030	6 139	2 486	7	6
1731	Electrical work .....	539	6 127	167 722	470 990	456 601	277 572	188 076	14 388	5 264	3	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework .....	177	879	18 001	61 878	57 722	32 508	25 334	4 156	929	8	9
1742	Plastering, drywall, and insulation work .....	347	4 309	95 474	254 411	238 927	159 390	90 551	15 484	3 628	5	3
1743	Terrazzo, tile, marble, and mosaic work .....	53	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
175	Carpentry and floor work:											
1751	Carpentry .....	407	1 793	32 094	100 410	91 071	60 897	33 683	9 339	1 131	7	6
1752	Floor laying and other floorwork .....	186	857	15 217	60 173	55 007	28 836	27 475	5 166	675	16	12
1761	Roofing, siding, and sheet metal work .....	380	2 899	54 498	219 779	204 935	116 764	88 538	14 845	2 229	6	5
1771	Concrete work .....	327	2 220	40 203	159 092	151 449	101 497	51 321	7 643	2 886	8	6
1781	Water well drilling .....	24	131	3 135	11 623	11 423	7 399	4 037	*200	*815	21	18
179	Miscellaneous special trade contractors:											
1791	Structural steel erection .....	35	702	19 697	63 093	59 041	40 536	18 860	4 052	*474	8	6
1793	Glass and glazing work .....	107	687	13 941	49 624	48 805	25 417	25 836	819	293	9	10
1794	Excavation work .....	145	1 181	30 987	116 951	108 354	80 206	30 482	8 598	7 869	7	7
1795	Wrecking and demolition work .....	*18	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1796	Installing building equipment, n.e.c. ....	66	592	18 432	49 798	(D)	29 749	20 163	(D)	378	9	(D)
1799	Special trade contractors, n.e.c. ....	271	1 557	26 284	92 895	87 109	59 509	31 653	5 786	2 027	9	8
6552	Land subdividers and developers, n.e.c. ....	107	484	8 078	53 767	33 508	25 399	11 559	20 259	(D)	21	18
	<b>SEATTLE, WA PMSA</b>											
	<b>Construction Industries and land subdividers and developers .....</b>	5 804	48 929	1 189 955	5 585 185	3 983 225	2 503 045	1 580 062	1 601 960	68 689	1	1
15,16, 17	<b>Construction Industries:</b>											
	<b>Building construction—General contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses .....	1 122	3 812	61 774	371 023	246 786	137 282	115 269	124 237	3 651	6	6
1522	Other residential buildings .....	105	884	17 958	152 655	70 149	38 440	32 376	82 507	1 149	11	9
1531	Operative builders .....	282	1 715	37 906	450 830	240 259	131 337	111 382	210 571	2 252	6	8
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses .....	52	924	26 694	194 937	77 235	42 673	(D)	117 702	665	7	7
1542	Nonresidential buildings, n.e.c. ....	464	7 484	197 300	1 404 334	663 265	424 225	(D)	741 068	5 417	3	2
16	<b>Heavy construction other than building construction—contractors:</b>											
1611	Highway and street construction .....	78	1 634	52 874	206 737	158 915	107 608	55 009	47 823	7 057	5	3
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction .....	*21	581	11 512	82 844	59 906	32 923	(D)	22 938	*2 582	36	17
1623	Water, sewer, and utility lines .....	118	1 811	50 922	215 004	181 606	121 849	62 541	33 397	6 254	4	4
1629	Heavy construction, n.e.c. ....	136	2 999	108 963	455 696	386 704	243 589	149 511	68 992	8 550	8	7



Table 12. **Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

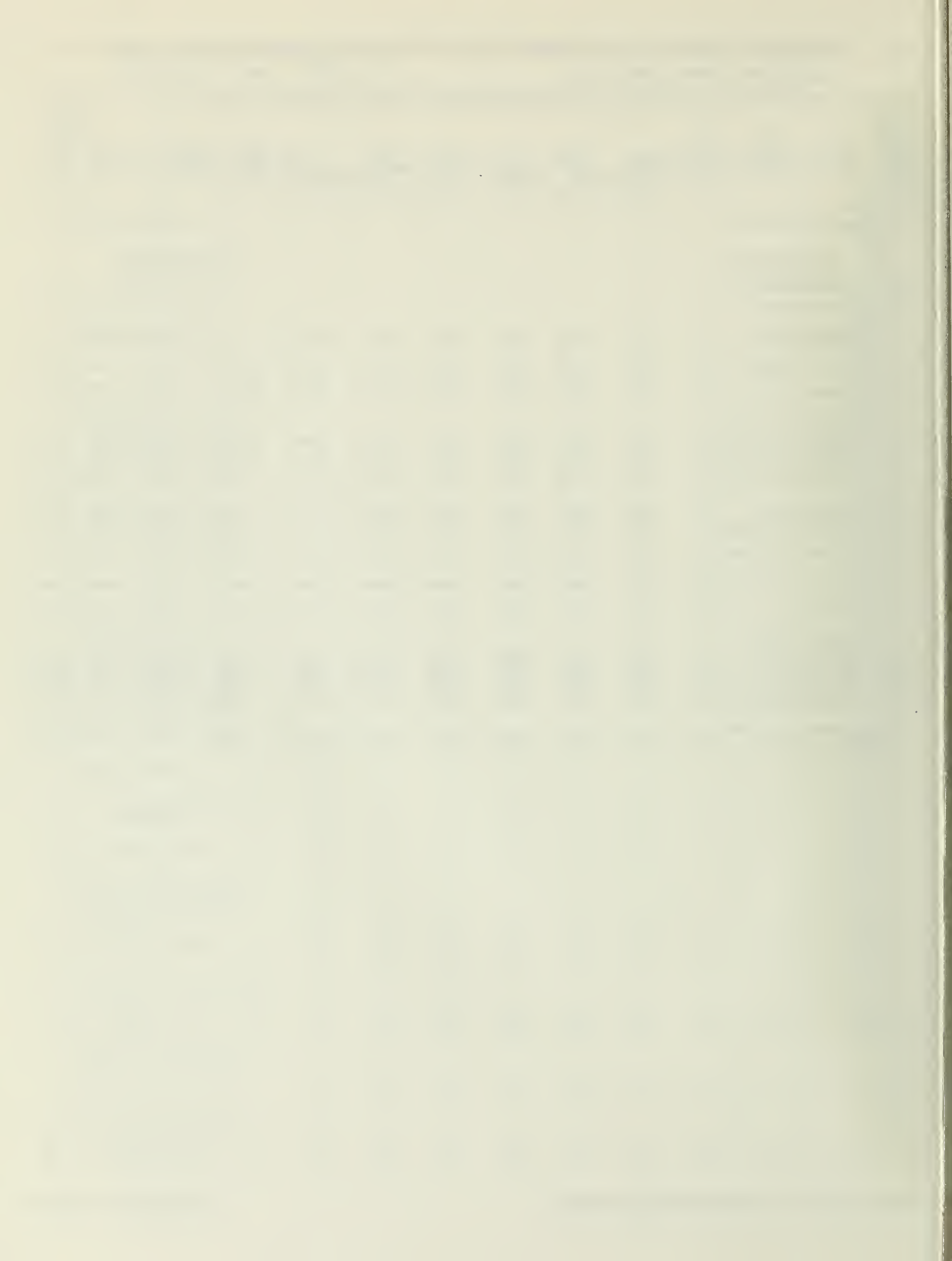
1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
	<b>SEATTLE, WA PMSA—Con.</b>											
	<b>Construction industries and     land subdividers and     developers—Con.</b>											
15,16, 17	<b>Construction industries—Con.</b>											
	<b>Special trade contractors:</b>											
1711	Plumbing, heating, and air- conditioning-----	498	4 419	119 095	420 953	363 967	235 019	145 430	56 986	4 742	3	4
1721	Painting and paper hanging-----	292	1 834	36 300	99 265	93 814	73 049	21 756	5 452	2 463	7	6
1731	Electrical work -----	461	5 162	140 805	395 867	385 565	234 663	159 736	10 302	4 321	3	2
174	Masonry, stonework, tile setting, and plastering:											
1741	Masonry, stone setting, and other stonework -----	137	756	15 720	53 800	50 016	26 958	23 167	3 784	594	8	9
1742	Plastering, drywall, and insulation work -----	275	3 441	78 090	202 840	190 818	129 530	72 249	12 022	3 070	6	4
1743	Terrazzo, tile, marble, and mosaic work -----	46	266	6 377	22 874	22 153	12 411	10 634	722	134	18	20
175	Carpentry and floor work:											
1751	Carpentry -----	357	1 563	26 988	87 507	80 396	53 539	28 761	7 110	900	7	7
1752	Floor laying and other floorwork-----	158	743	13 549	52 333	48 125	25 530	23 153	4 209	661	17	13
1761	Roofing, siding, and sheet metal work -----	305	2 313	44 188	182 305	170 718	96 292	74 586	11 588	1 701	6	6
1771	Concrete work -----	249	1 761	32 805	135 136	128 544	86 454	43 319	6 592	1 613	10	7
1781	Water well drilling -----	9	46	1 170	4 956	4 937	3 071	1 868	*19	*265	21	24
179	Miscellaneous special trade contractors:											
1791	Structural steel erection -----	31	663	18 830	61 462	57 471	39 399	18 427	3 991	*468	9	6
1793	Glass and glazing work -----	75	479	9 872	35 138	34 627	18 633	17 964	511	*228	11	12
1794	Excavation work -----	129	1 110	29 169	109 197	101 128	74 218	29 233	8 069	6 969	7	7
1795	Wrecking and demolition work -----	*14	118	2 278	7 038	6 688	5 969	1 111	350	235	37	7
1796	Installing building equipment, n.e.c.-----	61	572	17 659	47 183	46 690	27 966	19 349	493	378	9	3
1799	Special trade contractors, n.e.c.-----	238	1 417	23 795	84 399	78 963	53 739	29 198	5 436	1 520	9	9
6552	<b>Land subdividers and developers,     n.e.c. -----</b>	93	423	7 363	48 873	33 782	26 683	10 536	15 091	*855	21	18
	<b>TACOMA, WA PMSA</b>											
	<b>Construction industries and     land subdividers and     developers -----</b>	1 207	8 481	185 023	843 946	616 738	380 242	260 160	227 208	15 334	2	3
15,16, 17	<b>Construction industries:</b>											
	<b>Building construction—General         contractors and operative builders:</b>											
152	General contractors, residential buildings:											
1521	Single-family houses -----	253	845	13 196	74 943	54 293	33 434	21 880	20 650	460	12	15
1522	Other residential buildings -----	23	238	4 560	55 462	34 059	22 915	11 921	21 404	*353	17	6
1531	Operative builders -----	54	269	5 764	58 162	31 892	(S)	*25 665	*26 270	607	29	33
154	General contractors, nonresidential buildings:											
1541	Industrial buildings and warehouses -----	13	111	2 976	26 215	*16 017	10 230	*6 029	10 198	*119	22	41
1542	Nonresidential buildings, n.e.c. -----	73	893	22 149	163 706	65 941	41 858	24 154	97 765	514	13	10
16	<b>Heavy construction other than         building construction—contractors:</b>											
1611	Highway and street construction -----	13	475	15 409	53 034	44 658	32 976	20 335	8 377	3 225	8	4
162	Heavy construction, except highway:											
1622	Bridge, tunnel, and elevated highway construction-----	-	-	-	-	-	-	-	-	-	-	-
1623	Water, sewer, and utility lines -----	36	344	8 223	34 935	31 154	19 676	13 290	3 781	1 668	14	11
1629	Heavy construction, n.e.c. -----	36	227	5 515	34 277	25 654	13 497	12 396	8 623	1 342	14	9

**Table 12. Selected Statistics for Establishments With Payroll for Selected Metropolitan Statistical Areas: 1987—Con.**

[Thousand dollars. Detail may not add to total due to rounding. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendixes]

1987 SIC code	Geographic area and industry	Number of establish- ments	All employees**	Payroll, all employees	Value of construction work	Net value of construction work†	Value added††	Cost of materials, components, supplies, and fuels	Cost of construction work sub- contracted to others	Capital expend- itures, other than land	Relative standard error of estimate (percent) for column—	
		A	B	C	D	E	F	G	H	I	B	E
15,16, 17 17	<b>TACOMA, WA PMSA—Con.</b>											
	Construction industries and land subdividers and developers—Con.											
	Construction industries—Con.											
	Special trade contractors:											
	1711 Plumbing, heating, and air- conditioning-----	92	768	16 404	55 270	48 367	28 883	22 820	6 904	403	8	9
	1721 Painting and paper hanging-----	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)	(S)
	1731 Electrical work -----	78	965	26 917	75 123	71 037	42 909	28 341	4 086	944	3	3
	174 Masonry, stonework, tile setting, and plastering:											
	1741 Masonry, stone setting, and other stonework-----	40	123	2 282	8 078	7 706	5 549	2 167	(S)	(S)	26	33
	1742 Plastering, drywall, and insulation work -----	72	868	17 384	51 571	48 109	29 861	18 301	3 462	559	7	8
	1743 Terrazzo, tile, marble, and mosaic work -----	7	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(W)	(D)
	175 Carpentry and floor work:											
	1751 Carpentry-----	51	230	5 106	12 904	10 675	7 358	4 922	2 229	231	13	12
	1752 Floor laying and other floorwork----	*29	113	*1 668	7 839	6 882	3 306	4 322	*957	(D)	38	29
	1761 Roofing, siding, and sheet metal work -----	75	586	10 310	37 474	34 217	20 472	13 952	3 257	*527	14	9
	1771 Concrete work -----	78	459	7 398	23 956	22 905	15 043	8 003	1 051	1 273	13	10
	1781 Water well drilling -----	15	85	1 965	6 667	6 486	4 328	2 169	*181	*551	29	26
	179 Miscellaneous special trade contractors:											
	1791 Structural steel erection-----	4	40	866	1 631	1 570	1 136	434	*61	*6	4	3
	1793 Glass and glazing work -----	32	208	4 069	14 486	14 178	6 784	7 872	*308	65	20	21
	1794 Excavation work-----	*16	71	1 819	7 754	7 225	5 988	1 249	(S)	*900	34	36
	1795 Wrecking and demolition work -----	4	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
	1796 Installing building equipment, n.e.c.---	5	21	(S)	(S)	(D)	(S)	(S)	(D)	(S)	(D)	(D)
	1799 Special trade contractors, n.e.c.-----	33	140	2 489	8 496	8 146	5 770	2 455	350	(S)	18	21
6552	Land subdividers and developers, n.e.c.-----	*14	(S)	(S)	(S)	(S)	(S)	(D)	(S)	(D)	(S)	(S)





# APPENDIX A.

## Explanation of Terms

**Construction**—Is composed of three broad categories:

1. **New construction**—Includes the complete, original erection of structures and essential service facilities and the initial installation of integral equipment such as elevators, and plumbing, heating, and air-conditioning supplies and equipment.
2. **Additions, alterations or reconstruction**—Includes construction activity making structural changes to existing facilities. Generally, this type of activity is considered a capital investment in the property.
3. **Maintenance and repair**—Includes construction done for the purpose of upkeep of property rather than additional investment in the property.

Examples of the general distinction between maintenance and repair and reconstruction are provided here: roof repairs, including the replacement of shingles, gutters, etc., are classified under maintenance and repairs. A complete reroofing, however, is classified as reconstruction.

**Number of establishments in business during year**—Includes all establishments that were in business at any time during the year. It covers all full-year and part-year operations. Construction establishments which were inactive or idle for the entire year were not included.

**Proprietors and working partners**—These data were not collected on the census report forms. The data shown are based on crediting each sole proprietorship establishment with one active proprietor and each partnership establishment with two working partners.

**All employees**—Comprise all full-time and part-time employees on the payrolls of construction establishments, who worked or received pay for any part of the pay period including the 12th of March, May, August, and November. Included are all persons on paid sick leave, paid holidays, and paid vacations during these pay periods. Officers of corporations are included, but proprietors and partners of unincorporated firms are not.

All employees is the sum of all employees during the pay periods including the 12th of March, May, August, and November, divided by 4.

**Construction workers**—Includes all workers up through the working foreman level directly engaged in construction operations, such as painters, carpenters, plumbers, and electricians. Included are journeymen, mechanics, apprentices, laborers, truck drivers and helpers, equipment

operators, and on-site record keepers and security guards. Supervisory employees above the working foreman level are excluded from this category but are included in the "other employees" category.

**Other employees**—Includes employees in executive, purchasing, accounting, personnel, professional, technical activities, and routine office functions. Also included are supervisory employees above the working foreman level.

**Construction worker hours**—Includes the total number of hours worked by construction workers. Construction worker hours were collected for each of the four quarters of 1987.

**Payroll**—Includes the gross earnings paid in the calendar year 1987 to all employees on the payroll of construction establishments. It includes all forms of compensation such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, prior to such deductions as employees' Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. The total includes salaries of officers of these establishments, if a corporation, but excludes payments to the proprietor or partners, if an unincorporated concern.

**Employer costs for fringe benefits (supplemental labor costs)**—Represents expenditures made by the employer during 1987 for legally required and voluntary fringe benefit programs for employees.

**Legally required contributions**—Include Social Security contributions, unemployment compensation, workman's compensation, and State temporary disability payments.

**Voluntary payments**—Include life insurance premiums, pension plans, insurance premiums on hospital and medical plans, welfare plans, and union negotiated benefits.

Dollar value of business done comprises the following detail:

**Value of construction work done**—Includes all value of construction work done during 1987 for construction work performed by general contractors, special trades contractors, subcontractors, and land development and improvement work. Included is new construction, additions and alterations or reconstruction, and maintenance and repair construction work. Also included is the value of any construction work done by the reporting establishments for themselves.



Builders were instructed to include the value of buildings and other structures built or being built for sale in 1987 but not sold. They were to include the costs of such construction plus normal profit. Also included is the cost of construction work done on buildings for rent or lease.

Establishments engaged in the sale and installation of such construction components as plumbing, heating, and central air conditioning supplies and equipment; lumber and building materials; paint, glass, and wallpaper; and electrical and wiring supplies, elevators or escalators, etc., were instructed to include both the value for the installation and the receipts covering the price of the items installed.

Excluded was the cost of industrial and other specialized machinery and equipment which are not an integral part of a structure.

**Land receipts**—Includes receipts from the sale of land, whether held for sale or sold in connection with the sale of houses and other structures. It excludes the value of any improvements made to the land prior to the sale. (That value was to be included in the value of construction work done.)

**Other business receipts**—Includes business receipts not reported as value of construction work done or land receipts. The item includes business receipts from retail and wholesale trade, rental of equipment, manufacturing, transportation, legal service, insurance, finance, rental of property and other real estate operations, and other nonconstruction activities. Receipts for separately definable architectural and engineering work for others are also included here.

Excluded was the value of construction work done and receipts from other business operations in foreign countries and non-operating income such as interest and dividends.

**Net value of construction work**—Derived for each establishment by subtracting the costs for construction work subcontracted to others from the value of construction work done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

**Value added**—Derived for each establishment, value added is equal to dollar value of business done, less costs for construction work subcontracted to others, and costs for materials, components, supplies and fuels. For SIC 6552 and SIC 1531, for which land receipts are significant, land receipts are also subtracted from dollar value of business done. (For a further explanation see "Duplication in Value of Construction Work" section in the Introduction.)

**Selected costs**—Represents the costs for materials, components, and supplies; costs for construction work subcontracted to others; and costs for selected power, fuels, and lubricants. Capital expenditures and rental costs for machinery, equipment, and structures are shown elsewhere.

Costs for materials, components, and supplies include:

- total costs to reporting establishments during 1987 for the purchase of all materials, components, and supplies, except fuels. (Supplies include expendable tools which are charged to current accounts.)
- freight and other direct charges should represent only amount paid after discounts, and the value of materials, components, and supplies obtained from other establishments of the respondent's company.
- costs for materials, components, and supplies used by the reporting establishments in the construction or reconstruction of buildings/structures for themselves which are chargeable to their fixed assets accounts, are included in this item as are costs for materials bought and resold to others.
- costs made for direct purchases of materials, components, and supplies even though the purchases were subsequently provided to subcontractors for their use.

Excluded from this item are:

- industrial and other specialized machinery and equipment, such as printing presses; computer systems; etc., which are not an integral part of a structure
- materials furnished to contractors by the owners of projects.

Costs for construction work subcontracted to others include:

- all costs during 1987 for construction work subcontracted out to other construction contractors.

Excluded from this item are:

- The costs to the reporting establishment for its purchases of materials, components, and supplies, provided to a subcontractor for his use. Such costs are reported under a separate category, "costs for materials, components, and supplies."
- costs for the rental of machinery or equipment.

Costs for selected power, fuels, and lubricants include:

- costs for fuels, lubricants, and electric energy purchased during the year from other companies, or received from other establishments of the company.
- costs for natural and manufactured gas, fuel oil, coal and coke products, etc.

**Rental costs for machinery, equipment, and buildings**—Includes all costs during 1987 for renting or leasing construction machinery and equipment, transportation equipment, production equipment, office equipment, furniture and fixtures, scaffolding, office space, and buildings. It



excludes costs for the rental of land. It also excludes costs under agreements which, in effect, are conditional sales contracts such as capital leases. Such costs are included in "capital expenditures."

**Selected purchased services**—Includes all costs during 1987 for communication services purchased from other companies or from other establishments of the company. It also includes the cost of all repairs made to structures and equipment by outside companies, or from other establishments of the same company. It includes only the cost of that repair necessary to maintain property and equipment. It excludes the cost of improvements that increase the value of property, or the cost of adapting it for another use. Such costs are included in "capital expenditures".

**Assets and depreciation**—Refers to the original cost of all fixed tangible assets such as buildings and other structures (offices, shops, etc.); stationary machinery (generators, shop equipment, etc.); mobile machinery (tractors, trucks, etc.); and other equipment (office furniture and fixtures, etc.). Not included are such items as current assets, depletable assets, intangible assets, and nondepreciable assets.

Data on assets and depreciation were collected separately for: (1) buildings and other structures, additions, and related facilities; and, (2) machinery and equipment.

Respondents were also asked to report capitalized expenditures, depreciation charges, and the gross value of assets sold, retired, scrapped, destroyed, etc., during 1987.

**Capital expenditures**—Refers to all costs actually incurred during 1987 which were or would be chargeable to the fixed assets accounts of the reporting establishments and which were of the type for which depreciation accounts are ordinarily maintained. These expenditures cover the acquisition, the construction, and the major alteration of the reporting establishment's own buildings and other structures, whether purchased, constructed under contract, or constructed by the reporting establishment's own forces; and the acquisition of machinery and equipment.

If leasing arrangements met the criteria set down by the Financial Accounting Standards Board (FASB) for a capital lease, respondents were instructed to report the original cost or market value of that equipment or building as a fixed asset and capital expenditure if acquired during 1987.

If capital expenditures were not recorded directly at the establishment level but handled centrally at the company or division level, respondents were requested to report appropriate estimates for the individual establishments.

**Inventories**—Includes all of the materials and supplies that are owned regardless of where they are held. Excludes materials which are owned by others, but held by the reporting establishment.

Builders who built on their own account for sale were requested to report work in progress and finished units not sold for buildings and other structures built for sale.

Inventories of multi-establishment companies were instructed to be reported by the establishment that is responsible for the inventories even if these inventories were held at a separate location.

**Ownership of construction projects**—This item shows the distribution of the value of construction work done by ownership of the project, that is, Government owned or privately owned. This classification relates to the ownership of the projects or work undertaken during the construction phase. Government owned projects are shown separately for Federal, and State and local governments.

**Value of construction work subcontracted in from others**—Includes the value of construction work during 1987 for work done by reporting establishments for other construction contractors or builders. Establishments were asked to report the approximate percent of total value of construction work accounted for by such work, and the percentages reported were applied to the reported value of construction work to develop a value for this item.

**Types of construction**—This item provides data by the types of buildings, structures, or other facilities being constructed or worked on by construction establishments in 1987. Respondents were instructed that each building, structure, or other facility should be classified in terms of its function. For example, a restaurant building was to be classified in the restaurant category whether it was designed as a commercial restaurant building or an auxiliary unit of an educational institution. If respondents worked on more than one type of building or structure in a multibuilding complex, they were instructed to report separately for each building or type of structure. If they worked on a building that had more than one purpose, i.e, office and residential, or commercial, they were to classify the building by major purpose.

In addition all respondents were requested to report the percentage of the value of construction work done for new construction, additions, alterations, or reconstruction, and maintenance and repair work for each of these types. See the definition of "Construction" for the meanings of these terms.

#### Building construction:

- **Single-family houses, detached**—Includes all residential buildings constructed for one family use.
- **Single-family houses, attached (include townhouses)**—Includes all residential buildings with two or more living quarters side by side, completely independent of one another, and separated by an unbroken wall from ground to roof.
- **Apartment buildings with two or more apartments**—Includes high-rise, low-rise, or any structures containing two or more housing units (excluding attached single-family houses and townhouses described above).
- **Hotels and motels**—Includes hotels, motels, and tourist cabins intended for transient accommodations.



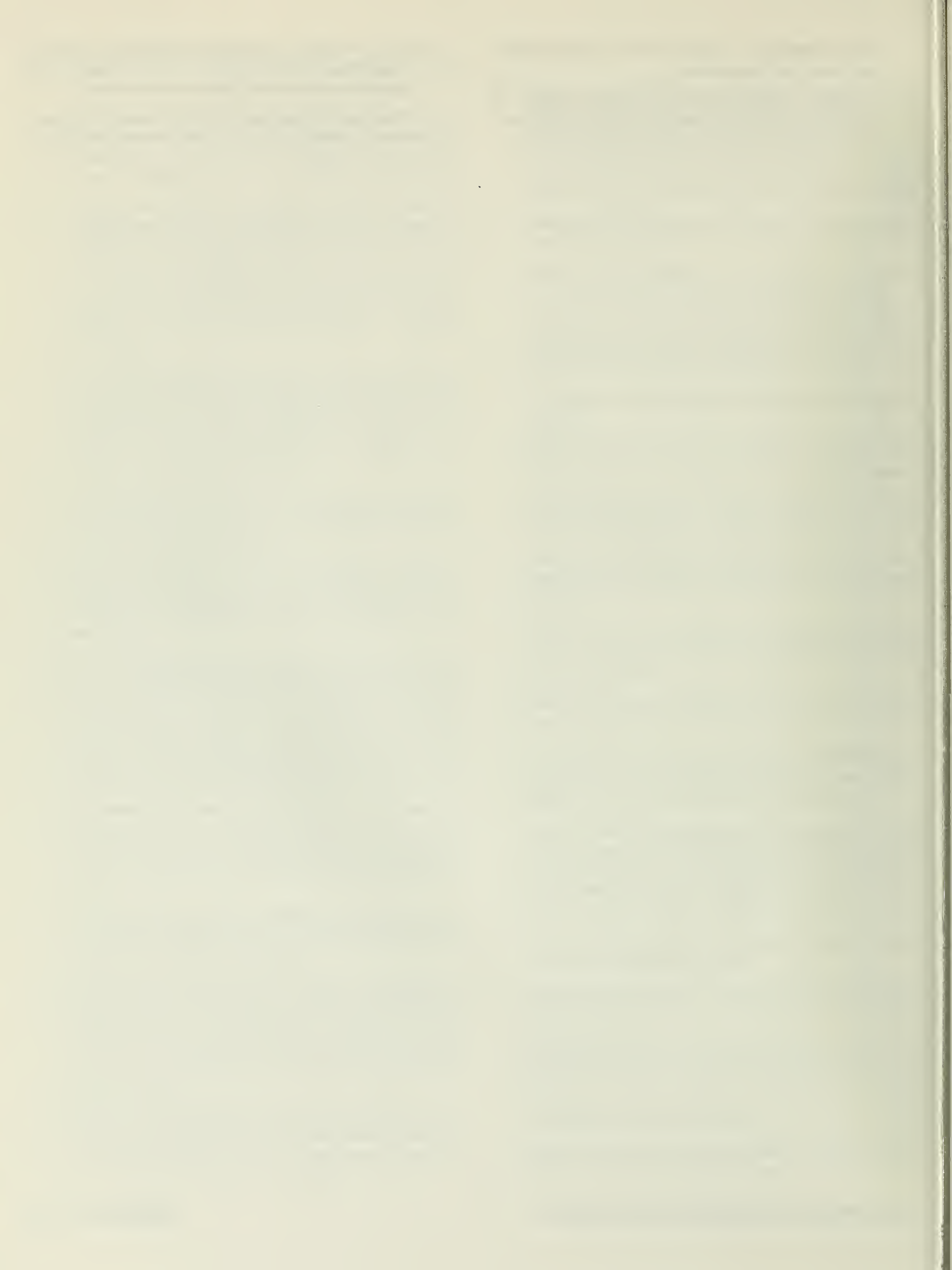
- **Other residential buildings**—Includes dormitories, fraternity and sorority houses, nurses homes, and other nonhousekeeping residential structures.
- **Office buildings**—Includes all buildings which are used primarily for office space or for government administrative offices. Also included are banks or financial buildings which are three stories or more.
- **Other commercial buildings, such as stores, restaurants, and automobile service stations**—Includes all buildings which are intended for use primarily in the wholesale, retail, and service trades. For example, shopping centers, department stores, drug stores, restaurants, public garages, auto service stations, and one or two story bank or financial institutions.
- **Industrial buildings**—Includes all industrial buildings and plants which are used to house production and assembly activities. Heavy industrial facilities such as blast furnaces, petroleum refineries, chemical complexes, etc., are not included in this category, but under nonbuilding construction.
- **Warehouses**—Includes commercial warehouses, cold storage plants, grain elevators, mini-warehouses, and other such storage buildings.
- **Religious buildings**—Includes all buildings which are intended for religious services or functions, such as churches, synagogues, convents, monasteries, and seminaries.
- **Educational buildings**—Includes all buildings which are used directly in administrative and instructional activities, such as colleges, universities, elementary and secondary schools, correspondence, commercial, and trade schools. Libraries, museums, and art galleries, as well as laboratories which are not a part of a manufacturing establishment, are also included.
- **Hospitals and institutional buildings**—Includes all buildings which are intended to provide hospital and institutional care, such as clinics, infirmaries, sanitariums, nursing homes, homes for the aged, and orphanages.
- **Farm buildings, nonresidential**—Includes nonresidential farm buildings such as barns, poultry houses, implement sheds, and farm silos.
- **Amusement, social, and recreational buildings**—Includes buildings which are used primarily for entertainment, social and recreational activities, such as sports arenas, theaters, music halls, golf and country club buildings, skating rinks, bowling alleys, and indoor swimming pools.
- **Other nonresidential buildings**—Includes nonresidential buildings which are not classified elsewhere, such as fire stations, prisons, civic centers, bus and air passenger terminals and hangars.

#### Nonbuilding construction:

- **Highways, streets and related work, such as installation of guardrails, highway signs, etc.**—Includes streets, roads, alleys, sidewalks, curbs and gutters, culverts, right-of-way drainage, erosion control and lighting. Also includes earthwork protective structures when used in connection with road improvements.
- **Outdoor swimming pools**—Includes wading pools and reflecting pools.
- **Recreational facilities**—Includes athletic fields, golf courses, outdoor tennis courts, trails, and camps.
- **Bridges and elevated highways**—Includes viaducts and overpasses; roads, highways, railroads, and causeways built on structural supports.
- **Tunnels**—Includes highway, pedestrian, and railroad tunnels.
- **Railroad construction**—Includes the construction of railroad beds, tracks, freight yards, and signal towers.
- **Subway construction**—Includes urban mass transit subway systems above or below ground.
- **Dam and reservoir construction**—Includes hydroelectric, water supply, and flood control dams and reservoirs.
- **Marine construction**—Includes dredging, underwater rock removal, breakwaters, navigational channels, jetties, and locks.
- **Harbor and port facilities**—Includes docks, piers, and wharves.
- **Conservation and development construction**—Includes land reclamation, irrigation projects, drainage canals, levees, and flood control projects.
- **Power and communication transmission lines, towers, and related facilities**—Includes electric power lines, telephone and telegraph lines, fiber optic cables, cable television lines, television and radio towers, electric light and power facilities.
- **Power plants, except nuclear**—Includes electric and steam generating plants.
- **Power plants, nuclear**—Includes atomic energy plants, and nuclear reactors.
- **Sewers, sewerlines, and related facilities**—Includes sanitary and storm sewers, and related facilities.
- **Sewage treatment plants**—Includes sewage treatment and waste disposal plants.
- **Water mains and related facilities**—Includes water supply systems and related facilities.

- **Water treatment plants**—Includes water filtration and water softening plants.
- **Pipeline construction other than sewer or waterlines**—Includes pipelines for the transmission of gas, petroleum products, and liquefied gases.
- **Blast furnaces, petroleum refineries, chemical complexes, etc.**—Includes coke ovens, and mining appurtenances such as tipples and washeries.
- **Other nonbuilding construction**—Includes all types of nonbuilding construction, not included elsewhere.



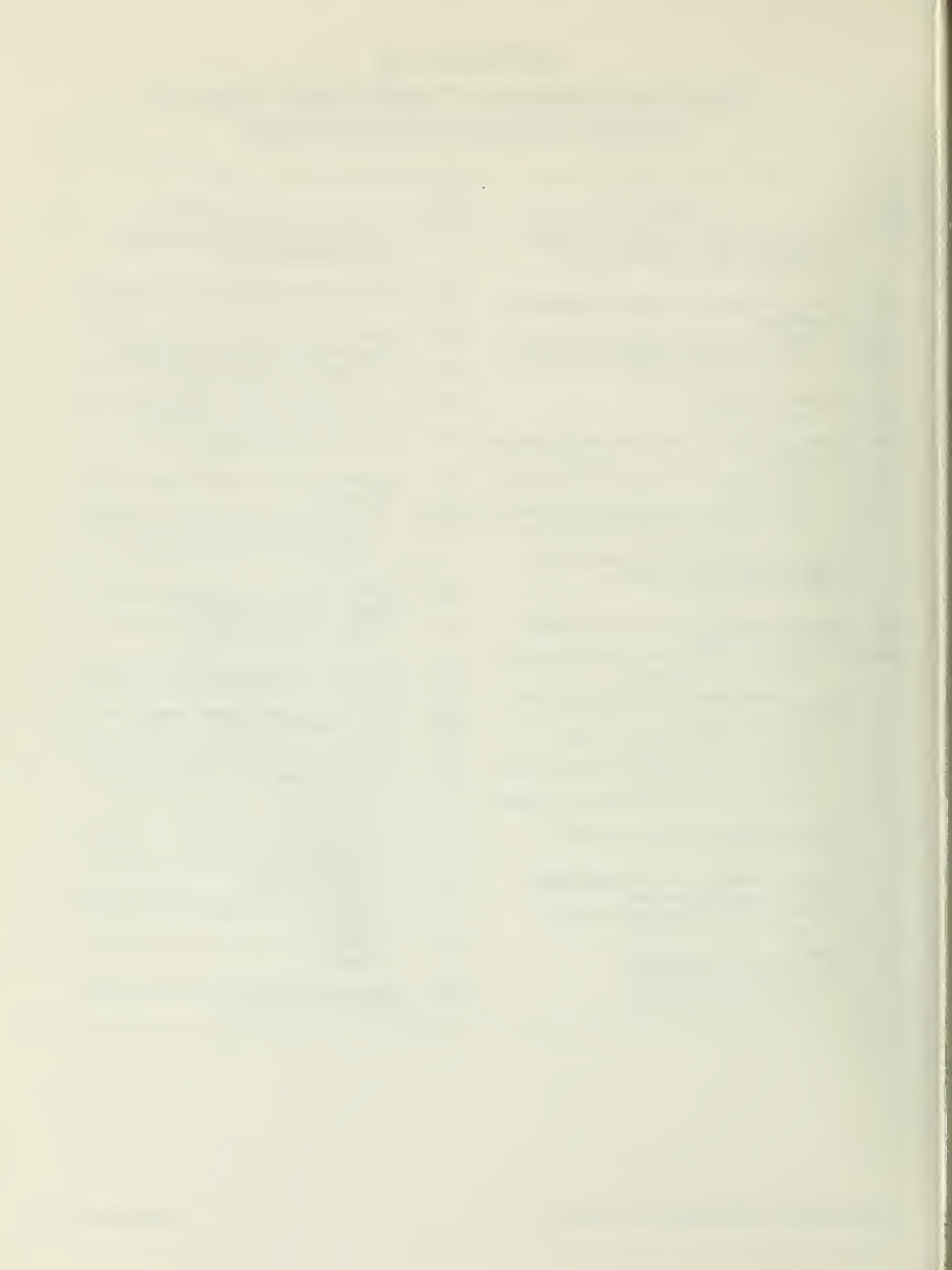


# APPENDIX B.

## Standard Industrial Classification Titles for Industry Groups and Industries

SIC code	Industry titles	SIC code	Industry titles
<b>15</b>	<b>BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS</b>	<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS—Con.</b>
<b>152</b>	<b>General Building Contractors—Residential Buildings</b>	<b>173</b>	<b>Electrical Work Special Trade Contractors</b>
1521	General Contractors—Single-Family Houses	1731	Electrical Work Special Trade Contractors
1522	General Contractors—Residential Buildings, Other Than Single-Family	<b>174</b>	<b>Masonry, Stone Work Tile Setting, and Plastering Special Trade Contractors</b>
<b>153</b>	<b>Operative Builders</b>	1741	Masonry, Stone Setting, and Other Stone Work Special Trade Contractors
1531	Operative Builders	1742	Plastering, Drywall, Acoustical, and Insulation Work Special Trade Contractors
<b>154</b>	<b>General Building Contractors—Nonresidential Buildings</b>	1743	Terrazzo, Tile, Marble, and Mosaic Work Special Trade Contractors
1541	General Contractors—Industrial Buildings and Warehouses	<b>175</b>	<b>Carpentry and Floor Work Special Trade Contractors</b>
1542	General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses	1751	Carpentry Work Special Trade Contractors
<b>16</b>	<b>HEAVY CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—CONTRACTORS</b>	1752	Floor Laying and Other Floor Work Special Trade Contractors, Not Elsewhere Classified
<b>161</b>	<b>Highway and Street Construction, Except Elevated Highways</b>	<b>176</b>	<b>Roofing, Siding, and Sheet Metal Work Special Trade Contractors</b>
1611	Highway and Street Construction Contractors, Except Elevated Highways	1761	Roofing, Siding, and Sheet Metal Work Special Trade Contractors
<b>162</b>	<b>Heavy Construction, Except Highway and Street Construction</b>	<b>177</b>	<b>Concrete Work Special Trade Contractors</b>
1622	Bridge, Tunnel, and Elevated Highway Construction Contractors	1771	Concrete Work Special Trade Contractors
1623	Water, Sewer, Pipeline, and Communications and Powerline Construction	<b>178</b>	<b>Water Well Drilling Special Trade Contractors</b>
1629	Heavy Construction, Not Elsewhere Classified	1781	Water Well Drilling Special Trade Contractors
<b>17</b>	<b>CONSTRUCTION—SPECIAL TRADE CONTRACTORS</b>	<b>179</b>	<b>Miscellaneous Special Trade Contractors</b>
<b>171</b>	<b>Plumbing, Heating, and Air-Conditioning Special Trade Contractors</b>	1791	Structural Steel Erection Special Trade Contractors
1711	Plumbing, Heating, and Air-Conditioning Special Trade Contractors	1793	Glass and Glazing Work Special Trade Contractors
<b>172</b>	<b>Painting and Paper Hanging Special Trade Contractors</b>	1794	Excavation Work Special Trade Contractors
1721	Painting and Paper Hanging Special Trade Contractors	1795	Wrecking and Demolition Work Special Trade Contractors
		1796	Installation or Erection of Building Equipment, Special Trade Contractors, Not Elsewhere Classified
		1799	Special Trade Contractors, Not Elsewhere Classified
		<b>6552</b>	<b>LAND SUBDIVIDERS AND DEVELOPERS, EXCEPT CEMETERIES</b>





# **APPENDIX C.**

## **Regions, Census Divisions, and States**

### **NORTHEAST**

#### **New England States**

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

#### **Middle Atlantic States**

New Jersey  
New York  
Pennsylvania

### **MIDWEST**

#### **East North Central States**

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

#### **West North Central States**

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

### **SOUTH**

#### **South Atlantic States**

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland

#### **South Atlantic States—Con.**

North Carolina  
South Carolina  
Virginia  
West Virginia

#### **East South Central States**

Alabama  
Kentucky  
Mississippi  
Tennessee

#### **West South Central States**

Arkansas  
Louisiana  
Oklahoma  
Texas

### **WEST**

#### **Mountain States**

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

#### **Pacific States**

Alaska  
California  
Hawaii  
Oregon  
Washington





# APPENDIX D.

## Metropolitan Statistical Areas

[Titles and definitions shown for MSA's, PMSA's, and CMSA's are those established by the Office of Management and Budget, as of June 30, 1987]

### Abilene, TX MSA

Taylor County, TX

### Akron, OH PMSA—see Cleveland-Akron-Lorain, OH CMSA

### Albany, GA MSA

Dougherty County, GA

Lee County, GA

### Albany-Schenectady-Troy, NY MSA

Albany County, NY

Greene County, NY

Montgomery County, NY

Rensselaer County, NY

Saratoga County, NY

Schenectady County, NY

### Albuquerque, NM MSA

Bernalillo County, NM

### Alexandria, LA MSA

Rapides Parish, LA

### Allentown-Bethlehem, PA-NJ MSA

Warren County, NJ

Carbon County, PA

Lehigh County, PA

Northampton County, PA

### Altoona, PA MSA

Blair County, PA

### Amarillo, TX MSA

Potter County, TX

Randall County, TX

### Anaheim-Santa Ana, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA

### Anchorage, AK MSA

Anchorage Borough, AK

### Anderson, IN MSA

Madison County, IN

### Anderson, SC MSA

Anderson County, SC

### Ann Arbor, MI PMSA—see Detroit-Ann Arbor, MI CMSA

### Anniston, AL MSA

Calhoun County, AL

### Appleton-Oshkosh-Neenah, WI MSA

Calumet County, WI

Outagamie County, WI

Winnebago County, WI

### Asheville, NC MSA

Buncombe County, NC

### Athens, GA MSA

Clarke County, GA

Jackson County, GA

Madison County, GA

Oconee County, GA

### Atlanta, GA MSA

Barrow County, GA

Butts County, GA

Cherokee County, GA

Clayton County, GA

Cobb County, GA

Coweta County, GA

De Kalb County, GA

Douglas County, GA

### Atlanta, GA MSA—Con.

Fayette County, GA

Forsyth County, GA

Fulton County, GA

Gwinnett County, GA

Henry County, GA

Newton County, GA

Paulding County, GA

Rockdale County, GA

Spalding County, GA

Walton County, GA

### Atlantic City, NJ MSA

Atlantic County, NJ

Cape May County, NJ

### Augusta, GA-SC MSA

Columbia County, GA

McDuffie County, GA

Richmond County, GA

Aiken County, SC

### Aurora-Elgin, IL PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA

### Austin, TX MSA

Hays County, TX

Travis County, TX

Williamson County, TX

### Bakersfield, CA MSA

Kern County, CA

### Baltimore, MD MSA

Anne Arundel County, MD

Baltimore County, MD

Carroll County, MD

Harford County, MD

Howard County, MD

Queen Anne's County, MD

Baltimore city, MD

### Bangor, ME MSA

Penobscot County, ME (part)

Bangor city, ME

Brewer city, ME

Eddington town, ME

Glenburn town, ME

Hampden town, ME

Hermon town, ME

Holden town, ME

Kenduskeag town, ME

Old Town city, ME

Orono town, ME

Orrington town, ME

Penobscot Indian Island Indian Reservation, ME

Veazie town, ME

Waldo County, ME (part)

Winterport town, ME

### Baton Rouge, LA MSA

Ascension Parish, LA

East Baton Rouge Parish, LA

Livingston Parish, LA

West Baton Rouge Parish, LA

### Battle Creek, MI MSA

Calhoun County, MI

### Beaumont-Port Arthur, TX MSA

Hardin County, TX

Jefferson County, TX

Orange County, TX

### Beaver County, PA PMSA—see Pittsburgh-Beaver Valley, PA CMSA

### Bellingham, WA MSA

Whatcom County, WA

### Benton Harbor, MI MSA

Berrien County, MI

### Bergen-Passaic, NJ PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA

### Billings, MT MSA

Yellowstone County, MT

### Biloxi-Gulfport, MS MSA

Hancock County, MS

Harrison County, MS

### Binghamton, NY MSA

Broome County, NY

Tioga County, NY

### Birmingham, AL MSA

Blount County, AL

Jefferson County, AL

St. Clair County, AL

Shelby County, AL

Walker County, AL

### Bismarck, ND MSA

Burleigh County, ND

Morton County, ND

### Bloomington, IN MSA

Monroe County, IN

### Bloomington-Normal, IL MSA

McLean County, IL

### Boise City, ID MSA

Ada County, ID

### Boston, MA PMSA—see Boston-Lawrence-Salem, MA-NH CMSA

### Boston-Lawrence-Salem, MA-NH CMSA

Boston, MA PMSA

Bristol County, MA (part)

Mansfield town, MA

Norton town, MA

Raynham town, MA

Essex County, MA (part)

Lynn city, MA

Lynnfield town, MA

Nahant town, MA

Saugus town, MA

Middlesex County, MA (part)

Acton town, MA

Arlington town, MA

Ashland town, MA

Ayer town, MA

Bedford town, MA

Belmont town, MA

Boxborough town, MA

Burlington town, MA

Cambridge city, MA

Carlisle town, MA

Concord town, MA



**Boston-Lawrence-Salem, MA-NH CMSA—Con.**

Boston, MA PMSA—Con.

Middlesex County, MA (part)—Con.

Everett city, MA  
 Framingham town, MA  
 Groton town, MA  
 Holliston town, MA  
 Hopkinton town, MA  
 Hudson town, MA  
 Lexington town, MA  
 Lincoln town, MA  
 Littleton town, MA  
 Malden city, MA  
 Marlborough city, MA  
 Maynard town, MA  
 Medford city, MA  
 Melrose city, MA  
 Natick town, MA  
 Newton city, MA  
 North Reading town, MA  
 Reading town, MA  
 Sherborn town, MA  
 Shirley town, MA  
 Somerville city, MA  
 Stoneham town, MA  
 Stow town, MA  
 Sudbury town, MA  
 Townsend town, MA  
 Wakefield town, MA  
 Waltham city, MA  
 Watertown town, MA  
 Wayland town, MA  
 Weston town, MA  
 Wilmington town, MA  
 Winchester town, MA  
 Woburn city, MA

Norfolk County, MA (part)

Bellingham town, MA  
 Braintree town, MA  
 Brookline town, MA  
 Canton town, MA  
 Cohasset town, MA  
 Dedham town, MA  
 Dover town, MA  
 Foxborough town, MA  
 Franklin town, MA  
 Holbrook town, MA  
 Medfield town, MA  
 Medway town, MA  
 Millis town, MA  
 Milton town, MA  
 Needham town, MA  
 Norfolk town, MA  
 Norwood town, MA  
 Quincy city, MA  
 Randolph town, MA  
 Sharon town, MA  
 Stoughton town, MA  
 Walpole town, MA  
 Wellesley town, MA  
 Westwood town, MA  
 Weymouth town, MA  
 Wrentham town, MA

Plymouth County, MA (part)

Carver town, MA  
 Duxbury town, MA  
 Hanover town, MA  
 Hanson town, MA  
 Hingham town, MA  
 Hull town, MA

**Boston-Lawrence-Salem, MA-NH CMSA—Con.**

Boston, MA PMSA—Con.

Plymouth County, MA (part)—Con.

Kingston town, MA  
 Lakeville town, MA  
 Marshfield town, MA  
 Middleborough town, MA  
 Norwell town, MA  
 Pembroke town, MA  
 Plymouth town, MA  
 Plympton town, MA  
 Rockland town, MA  
 Scituate town, MA

Suffolk County, MA (part)

Boston city, MA  
 Chelsea city, MA  
 Revere city, MA  
 Winthrop town, MA

Worcester County, MA (part)

Berlin town, MA  
 Bolton town, MA  
 Harvard town, MA  
 Hopedale town, MA  
 Lancaster town, MA  
 Mendon town, MA  
 Milford town, MA  
 Southborough town, MA  
 Upton town, MA

Brockton, MA PMSA

Bristol County, MA (part)

Easton town, MA

Norfolk County, MA (part)

Avon town, MA

Plymouth County, MA (part)

Abington town, MA  
 Bridgewater town, MA  
 Brockton city, MA  
 East Bridgewater town, MA  
 Halifax town, MA  
 West Bridgewater town, MA  
 Whitman town, MA

Lawrence-Haverhill, MA-NH PMSA

Essex County, MA (part)

Amesbury town, MA  
 Andover town, MA  
 Boxford town, MA  
 Georgetown town, MA  
 Groveland town, MA  
 Haverhill city, MA  
 Lawrence city, MA  
 Merrimac town, MA  
 Methuen town, MA  
 Newbury town, MA  
 Newburyport city, MA  
 North Andover town, MA  
 Salisbury town, MA  
 West Newbury town, MA

Rockingham County, NH (part)

Atkinson town, NH  
 Brentwood town, NH  
 Danville town, NH  
 Derry town, NH  
 East Kingston town, NH  
 Hampstead town, NH  
 Kingston town, NH  
 Newton town, NH  
 Plaistow town, NH  
 Salem town, NH  
 Sandown town, NH  
 Seabrook town, NH  
 Windham town, NH

**Boston-Lawrence-Salem, MA-NH CMSA—Con.**

Lowell, MA-NH PMSA

Middlesex County, MA (part)

Billerica town, MA  
 Chelmsford town, MA  
 Dracut town, MA  
 Dunstable town, MA  
 Lowell city, MA  
 Pepperell town, MA  
 Tewksbury town, MA  
 Tyngsborough town, MA  
 Westford town, MA

Hillsborough County, NH (part)

Pelham town, NH

Nashua, NH PMSA

Hillsborough County, NH (part)

Amherst town, NH  
 Brookline town, NH  
 Hollis town, NH  
 Hudson town, NH  
 Litchfield town, NH  
 Merrimack town, NH  
 Milford town, NH  
 Mont Vernon town, NH  
 Nashua city, NH  
 Wilton town, NH

Rockingham County, NH (part)

Londonderry town, NH

Salem-Gloucester, MA PMSA

Essex County, MA (part)

Beverly city, MA  
 Danvers town, MA  
 Essex town, MA  
 Gloucester city, MA  
 Hamilton town, MA  
 Ipswich town, MA  
 Manchester town, MA  
 Marblehead town, MA  
 Middleton town, MA  
 Peabody city, MA  
 Rockport town, MA  
 Rowley town, MA  
 Salem city, MA  
 Swampscott town, MA  
 Topsfield town, MA  
 Wenham town, MA

**Boulder-Longmont, CO PMSA—see Denver-****Boulder, CO CMSA****Bradenton, FL MSA**

Manatee County, FL

**Brazoria, TX PMSA—see Houston-Galveston-****Brazoria, TX CMSA****Bremerton, WA MSA**

Kitsap County, WA

**Bridgeport-Milford, CT PMSA—see New York-****Northern New Jersey-Long Island, NY-NJ-CT CMSA****Bristol, CT PMSA—see Hartford-New Britain-****Middletown, CT CMSA****Brockton, MA PMSA—see Boston-Lawrence-****Salem, MA-NH CMSA****Brownsville-Harlingen, TX MSA**

Cameron County, TX

**Bryan-College Station, TX MSA**

Brazos County, TX

**Buffalo, NY PMSA—see Buffalo-Niagara Falls, NY CMSA**



- Buffalo-Niagara Falls, NY CMSA**  
Buffalo, NY PMSA  
Erie County, NY  
Niagara Falls, NY PMSA  
Niagara County, NY
- Burlington, NC MSA**  
Alamance County, NC
- Burlington, VT MSA**  
Chittenden County, VT (part)  
Burlington city, VT  
Charlotte town, VT  
Colchester town, VT  
Essex Junction village, VT  
Essex town balance, VT  
Hinesburg town, VT  
Jericho town, VT  
Jericho village, VT  
Milton town, VT  
Milton village, VT  
Richmond town, VT  
Richmond village, VT  
St. George town, VT  
Shelburne town, VT  
South Burlington city, VT  
Williston town, VT  
Winooski city, VT  
Franklin County, VT (part)  
Georgia town, VT  
Grand Isle town, VT  
South Hero town, VT
- Canton, OH MSA**  
Carroll County, OH  
Stark County, OH
- Casper, WY MSA**  
Natrona County, WY
- Cedar Rapids, IA MSA**  
Linn County, IA
- Champaign-Urbana-Rantoul, IL MSA**  
Champaign County, IL
- Charleston, SC MSA**  
Berkeley County, SC  
Charleston County, SC  
Dorchester County, SC
- Charleston, WV MSA**  
Kanawha County, WV  
Putnam County, WV
- Charlotte-Gastonia-Rock Hill, NC-SC MSA**  
Cabarrus County, NC  
Gaston County, NC  
Lincoln County, NC  
Mecklenburg County, NC  
Rowan County, NC  
Union County, NC  
York County, SC
- Charlottesville, VA MSA**  
Albemarle County, VA  
Fluvanna County, VA  
Greene County, VA  
Charlottesville city, VA
- Chattanooga, TN-GA MSA**  
Catoosa County, GA  
Dade County, GA  
Walker County, GA  
Hamilton County, TN  
Marion County, TN  
Sequatchie County, TN
- Cheyenne, WY MSA**  
Laramie County, WY
- Chicago, IL PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA**
- Chicago-Gary-Lake County, IL-IN-WI CMSA**  
Aurora-Elgin, IL PMSA  
Kane County, IL  
Kendall County, IL  
Chicago, IL PMSA  
Cook County, IL  
Du Page County, IL  
McHenry County, IL  
Gary-Hammond, IN PMSA  
Lake County, IN  
Porter County, IN  
Joliet, IL PMSA  
Grundy County, IL  
Will County, IL  
Kenosha, WI PMSA  
Kenosha County, WI  
Lake County, IL PMSA  
Lake County, IL
- Chico, CA MSA**  
Butte County, CA
- Cincinnati, OH-KY-IN PMSA—see Cincinnati-Hamilton, OH-KY-IN CMSA**
- Cincinnati-Hamilton, OH-KY-IN CMSA**  
Cincinnati, OH-KY-IN PMSA  
Dearborn County, IN  
Boone County, KY  
Campbell County, KY  
Kenton County, KY  
Clermont County, OH  
Hamilton County, OH  
Warren County, OH  
Hamilton-Middletown, OH PMSA  
Butler County, OH
- Clarksville-Hopkinsville, TN-KY MSA**  
Christian County, KY  
Montgomery County, TN
- Cleveland, OH PMSA—see Cleveland-Akron-Lorain, OH CMSA**
- Cleveland-Akron-Lorain, OH CMSA**  
Akron, OH PMSA  
Portage County, OH  
Summit County, OH  
Cleveland, OH PMSA  
Cuyahoga County, OH  
Geauga County, OH  
Lake County, OH  
Medina County, OH  
Lorain-Elyria, OH PMSA  
Lorain County, OH
- Colorado Springs, CO MSA**  
El Paso County, CO
- Columbia, MO MSA**  
Boone County, MO
- Columbia, SC MSA**  
Lexington County, SC  
Richland County, SC
- Columbus, GA-AL MSA**  
Russell County, AL  
Chattahoochee County, GA  
Muscogee County, GA
- Columbus, OH MSA**  
Delaware County, OH  
Fairfield County, OH  
Franklin County, OH  
Licking County, OH  
Madison County, OH  
Pickaway County, OH  
Union County, OH
- Corpus Christi, TX MSA**  
Nueces County, TX  
San Patricio County, TX
- Cumberland, MD-WV MSA**  
Allegany County, MD  
Mineral County, WV
- Dallas, TX PMSA—see Dallas-Fort Worth, TX CMSA**
- Dallas-Fort Worth, TX CMSA**  
Dallas, TX PMSA  
Collin County, TX  
Dallas County, TX  
Denton County, TX  
Ellis County, TX  
Kaufman County, TX  
Rockwall County, TX  
Fort Worth-Arlington, TX PMSA  
Johnson County, TX  
Parker County, TX  
Tarrant County, TX
- Danbury, CT PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**
- Danville, VA MSA**  
Pittsylvania County, VA  
Danville city, VA
- Davenport-Rock Island-Moline, IA-IL MSA**  
Henry County, IL  
Rock Island County, IL  
Scott County, IA
- Dayton-Springfield, OH MSA**  
Clark County, OH  
Greene County, OH  
Miami County, OH  
Montgomery County, OH
- Daytona Beach, FL MSA**  
Volusia County, FL
- Decatur, IL MSA**  
Macon County, IL
- Denver, CO PMSA—see Denver-Boulder, CO CMSA**
- Denver-Boulder, CO CMSA**  
Boulder-Longmont, CO PMSA  
Boulder County, CO  
Denver, CO PMSA  
Adams County, CO  
Arapahoe County, CO  
Denver County, CO  
Douglas County, CO  
Jefferson County, CO
- Des Moines, IA MSA**  
Dallas County, IA  
Polk County, IA  
Warren County, IA
- Detroit, MI PMSA—see Detroit-Ann Arbor, MI CMSA**
- Detroit-Ann Arbor, MI CMSA**  
Ann Arbor, MI PMSA  
Washtenaw County, MI  
Detroit, MI PMSA  
Lapeer County, MI  
Livingston County, MI  
Macomb County, MI  
Monroe County, MI  
Oakland County, MI  
St. Clair County, MI  
Wayne County, MI
- Dothan, AL MSA**  
Dale County, AL  
Houston County, AL
- Dubuque, IA MSA**  
Dubuque County, IA



**Duluth, MN-WI MSA**  
St. Louis County, MN  
Douglas County, WI

**Eau Claire, WI MSA**  
Chippewa County, WI  
Eau Claire County, WI

**El Paso, TX MSA**  
El Paso County, TX

**Elkhart-Goshen, IN MSA**  
Elkhart County, IN

**Elmira, NY MSA**  
Chemung County, NY

**Enid, OK MSA**  
Garfield County, OK

**Erie, PA MSA**  
Erie County, PA

**Eugene-Springfield, OR MSA**  
Lane County, OR

**Evansville, IN-KY MSA**  
Posey County, IN  
Vanderburgh County, IN  
Warrick County, IN  
Henderson County, KY

**Fall River, MA-RI PMSA—see Providence-Pawtucket-Fall River, RI-MA CMSA**

**Fargo-Moorhead, ND-MN MSA**  
Clay County, MN  
Cass County, ND

**Fayetteville, NC MSA**  
Cumberland County, NC

**Fayetteville-Springdale, AR MSA**  
Washington County, AR

**Fitchburg-Leominster, MA MSA**  
Middlesex County, MA (part)  
Ashby town, MA  
Worcester County, MA (part)  
Ashburnham town, MA  
Fitchburg city, MA  
Leominster city, MA  
Lunenburg town, MA  
Westminster town, MA

**Flint, MI MSA**  
Genesee County, MI

**Florence, AL MSA**  
Colbert County, AL  
Lauderdale County, AL

**Florence, SC MSA**  
Florence County, SC

**Fort Collins-Loveland, CO MSA**  
Larimer County, CO

**Fort Lauderdale-Hollywood-Pompano Beach, FL PMSA—see Miami-Fort Lauderdale, FL CMSA**

**Fort Myers-Cape Coral, FL MSA**  
Lee County, FL

**Fort Pierce, FL MSA**  
Martin County, FL  
St. Lucie County, FL

**Fort Smith, AR-OK MSA**  
Crawford County, AR  
Sebastian County, AR  
Sequoyah County, OK

**Fort Walton Beach, FL MSA**  
Okaloosa County, FL

**Fort Wayne, IN MSA**  
Allen County, IN  
De Kalb County, IN  
Whitley County, IN

**Fort Worth-Arlington, TX PMSA—see Dallas-Fort Worth, TX CMSA**

**Fresno, CA MSA**  
Fresno County, CA

**Gadsden, AL MSA**  
Etowah County, AL

**Gainesville, FL MSA**  
Alachua County, FL  
Bradford County, FL

**Galveston-Texas City, TX PMSA—see Houston-Galveston-Brazoria, TX CMSA**

**Gary-Hammond, IN PMSA—see Chicago-Gary-Lake County, IL-IN-WI CMSA**

**Glens Falls, NY MSA**  
Warren County, NY  
Washington County, NY

**Grand Forks, ND MSA**  
Grand Forks County, ND

**Grand Rapids, MI MSA**  
Kent County, MI  
Ottawa County, MI

**Great Falls, MT MSA**  
Cascade County, MT

**Greeley, CO MSA**  
Weld County, CO

**Green Bay, WI MSA**  
Brown County, WI

**Greensboro-Winston-Salem-High Point, NC MSA**  
Davidson County, NC  
Davie County, NC  
Forsyth County, NC  
Guilford County, NC  
Randolph County, NC  
Stokes County, NC  
Yadkin County, NC

**Greenville-Spartanburg, SC MSA**  
Greenville County, SC  
Pickens County, SC  
Spartanburg County, SC

**Hagerstown, MD MSA**  
Washington County, MD

**Hamilton-Middletown, OH PMSA—see Cincinnati-Hamilton, OH-KY-IN CMSA**

**Harrisburg-Lebanon-Carlisle, PA MSA**  
Cumberland County, PA  
Dauphin County, PA  
Lebanon County, PA  
Perry County, PA

**Hartford, CT PMSA—see Hartford-New Britain-Middletown, CT CMSA**

**Hartford-New Britain-Middletown, CT CMSA**  
Bristol, CT PMSA  
Hartford County, CT (part)  
Bristol city, CT  
Burlington town, CT  
Litchfield County, CT (part)  
Plymouth town, CT  
Hartford, CT PMSA  
Hartford County, CT (part)  
Avon town, CT  
Bloomfield town, CT  
Canton town, CT  
East Granby town, CT  
East Hartford town, CT  
East Windsor town, CT  
Enfield town, CT  
Farmington town, CT  
Glastonbury town, CT  
Granby town, CT  
Hartford city, CT  
Manchester town, CT  
Marlborough town, CT

**Hartford-New Britain-Middletown, CT CMSA—Con.**  
Hartford, CT PMSA—Con.  
Hartford County, CT (part)—Con.  
Newington town, CT  
Rocky Hill town, CT  
Simsbury town, CT  
South Windsor town, CT  
Suffield town, CT  
West Hartford town, CT  
Wethersfield town, CT  
Windsor Locks town, CT  
Windsor town, CT  
Litchfield County, CT (part)  
Barkhamsted town, CT  
New Hartford town, CT  
East Haddam town, CT  
New London County, CT (part)  
Colchester borough, CT  
Colchester town balance, CT  
Tolland County, CT (part)  
Andover town, CT  
Bolton town, CT  
Columbia town, CT  
Coventry town, CT  
Ellington town, CT  
Hebron town, CT  
Somers town, CT  
Stafford Springs borough, CT  
Stafford town balance, CT  
Tolland town, CT  
Vernon town, CT  
Willington town, CT  
Middletown, CT PMSA  
Middlesex County, CT (part)  
Cromwell town, CT  
Durham town, CT  
East Hampton town, CT  
Haddam town, CT  
Middlefield town, CT  
Middletown city, CT  
Portland town, CT  
New Britain, CT PMSA  
Hartford County, CT (part)  
Berlin town, CT  
New Britain city, CT  
Plainville town, CT  
Southington town, CT

**Hickory, NC MSA**  
Alexander County, NC  
Burke County, NC  
Catawba County, NC

**Honolulu, HI MSA**  
Honolulu County, HI

**Houma-Thibodaux, LA MSA**  
Lafourche Parish, LA  
Terrebonne Parish, LA

**Houston, TX PMSA—see Houston-Galveston-Brazoria, TX CMSA**

**Houston-Galveston-Brazoria, TX CMSA**  
Brazoria, TX PMSA  
Brazoria County, TX  
Galveston-Texas City, TX PMSA  
Galveston County, TX  
Houston, TX PMSA  
Fort Bend County, TX  
Harris County, TX  
Liberty County, TX  
Montgomery County, TX  
Waller County, TX



**Huntington-Ashland, WV-KY-OH MSA**

Boyd County, KY  
 Carter County, KY  
 Greenup County, KY  
 Lawrence County, OH  
 Cabell County, WV  
 Wayne County, WV

**Huntsville, AL MSA**

Madison County, AL

**Indianapolis, IN MSA**

Boone County, IN  
 Hamilton County, IN  
 Hancock County, IN  
 Hendricks County, IN  
 Johnson County, IN  
 Marion County, IN  
 Morgan County, IN  
 Shelby County, IN

**Iowa City, IA MSA**

Johnson County, IA

**Jackson, MI MSA**

Jackson County, MI

**Jackson, MS MSA**

Hinds County, MS  
 Madison County, MS  
 Rankin County, MS

**Jackson, TN MSA**

Madison County, TN

**Jacksonville, FL MSA**

Clay County, FL  
 Duval County, FL  
 Nassau County, FL  
 St. Johns County, FL

**Jacksonville, NC MSA**

Onslow County, NC

**Janesville-Beloit, WI MSA**

Rock County, WI

**Jersey City, NJ PMSA—see New York-Northern****New Jersey-Long Island, NY-NJ-CT CMSA****Johnson City-Kingsport-Bristol, TN-VA MSA**

Carter County, TN  
 Hawkins County, TN  
 Sullivan County, TN  
 Unicoi County, TN  
 Washington County, TN  
 Scott County, VA  
 Washington County, VA  
 Bristol city, VA

**Johnstown, PA MSA**

Cambria County, PA  
 Somerset County, PA

**Joliet, IL PMSA—see Chicago-Gary-Lake  
County, IL-IN-WI CMSA****Joplin, MO MSA**

Jasper County, MO  
 Newton County, MO

**Kalamazoo, MI MSA**

Kalamazoo County, MI

**Kankakee, IL MSA**

Kankakee County, IL

**Kansas City, MO-KS MSA**

Johnson County, KS  
 Leavenworth County, KS  
 Miami County, KS  
 Wyandotte County, KS  
 Cass County, MO  
 Clay County, MO  
 Jackson County, MO  
 Lafayette County, MO  
 Platte County, MO  
 Ray County, MO

**Kenosha, WI PMSA—see Chicago-Gary-Lake****County, IL-IN-WI CMSA****Killeen-Temple, TX MSA**

Bell County, TX  
 Coryell County, TX

**Knoxville, TN MSA**

Anderson County, TN  
 Blount County, TN  
 Grainger County, TN  
 Jefferson County, TN  
 Knox County, TN  
 Sevier County, TN  
 Union County, TN

**Kokomo, IN MSA**

Howard County, IN  
 Tipton County, IN

**La Crosse, WI MSA**

La Crosse County, WI

**Lafayette, LA MSA**

Lafayette Parish, LA  
 St. Martin Parish, LA

**Lafayette-West Lafayette, IN MSA**

Tippecanoe County, IN

**Lake Charles, LA MSA**

Calcasieu Parish, LA

**Lake County, IL PMSA—see Chicago-Gary-****Lake County, IL-IN-WI CMSA****Lakeland-Winter Haven, FL MSA**

Polk County, FL

**Lancaster, PA MSA**

Lancaster County, PA

**Lansing-East Lansing, MI MSA**

Clinton County, MI  
 Eaton County, MI  
 Ingham County, MI

**Laredo, TX MSA**

Webb County, TX

**Las Cruces, NM MSA**

Dona Ana County, NM

**Las Vegas, NV MSA**

Clark County, NV

**Lawrence, KS MSA**

Douglas County, KS

**Lawrence-Haverhill, MA-NH PMSA—see Boston-****Lawrence-Salem, MA-NH CMSA****Lawton, OK MSA**

Comanche County, OK

**Lewiston-Auburn, ME MSA**

Androscoggin County, ME (part)  
 Auburn city, ME  
 Greene town, ME  
 Lewiston city, ME  
 Lisbon town, ME  
 Mechanic Falls town, ME  
 Poland town, ME  
 Sabattus town, ME

**Lexington-Fayette, KY MSA**

Bourbon County, KY  
 Clark County, KY  
 Fayette County, KY  
 Jessamine County, KY  
 Scott County, KY  
 Woodford County, KY

**Lima, OH MSA**

Allen County, OH  
 Auglaize County, OH

**Lincoln, NE MSA**

Lancaster County, NE

**Little Rock-North Little Rock, AR MSA**

Faulkner County, AR  
 Lonoke County, AR  
 Pulaski County, AR  
 Saline County, AR

**Longview-Marshall, TX MSA**

Gregg County, TX  
 Harrison County, TX

**Lorain-Elyria, OH PMSA—see Cleveland-  
Akron-Lorain, OH CMSA****Los Angeles-Anaheim-Riverside, CA CMSA**

Anaheim-Santa Ana, CA PMSA  
 Orange County, CA  
 Los Angeles-Long Beach, CA PMSA  
 Los Angeles County, CA  
 Oxnard-Ventura, CA PMSA  
 Ventura County, CA  
 Riverside-San Bernardino, CA PMSA  
 Riverside County, CA  
 San Bernardino County, CA

**Los Angeles-Long Beach, CA PMSA—see  
Los Angeles-Anaheim-Riverside, CA CMSA****Louisville, KY-IN MSA**

Clark County, IN  
 Floyd County, IN  
 Harrison County, IN  
 Bullitt County, KY  
 Jefferson County, KY  
 Oldham County, KY  
 Shelby County, KY

**Lowell, MA-NH PMSA—see Boston-Lawrence-  
Salem, MA-NH CMSA****Lubbock, TX MSA**

Lubbock County, TX

**Lynchburg, VA MSA**

Amherst County, VA  
 Campbell County, VA  
 Lynchburg city, VA

**Macon-Warner Robins, GA MSA**

Bibb County, GA  
 Houston County, GA  
 Jones County, GA  
 Peach County, GA

**Madison, WI MSA**

Dane County, WI

**Manchester, NH MSA**

Hillsborough County, NH (part)  
 Bedford town, NH  
 Goffstown town, NH  
 Manchester city, NH  
 Merrimack County, NH (part)  
 Allenstown town, NH  
 Hooksett town, NH  
 Auburn town, NH  
 Candia town, NH

**Mansfield, OH MSA**

Richland County, OH

**McAllen-Edinburg-Mission, TX MSA**

Hidalgo County, TX

**Medford, OR MSA**

Jackson County, OR

**Melbourne-Titusville-Palm Bay, FL MSA**

Brevard County, FL

**Memphis, TN-AR-MS MSA**

Crittenden County, AR  
 De Soto County, MS  
 Shelby County, TN  
 Tipton County, TN

**Merced, CA MSA**

Merced County, CA

**Miami-Fort Lauderdale, FL CMSA**

Fort Lauderdale-Hollywood-Pompano  
 Beach, FL PMSA  
 Broward County, FL  
 Miami-Hialeah, FL PMSA  
 Dade County, FL



Miami-Hialeah, FL PMSA—see Miami-Fort Lauderdale, FL CMSA

Middlesex-Somerset-Hunterdon, NJ PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA

Middletown, CT PMSA—see Hartford-New Britain-Middletown, CT CMSA

Midland, TX MSA  
Midland County, TX

Milwaukee, WI PMSA—see Milwaukee-Racine, WI CMSA

Milwaukee-Racine, WI CMSA  
Milwaukee, WI PMSA  
Milwaukee County, WI  
Ozaukee County, WI  
Washington County, WI  
Waukesha County, WI

Racine, WI PMSA  
Racine County, WI

Minneapolis-St. Paul, MN-WI MSA  
Anoka County, MN  
Carver County, MN  
Chisago County, MN  
Dakota County, MN  
Hennepin County, MN  
Isanti County, MN  
Ramsey County, MN  
Scott County, MN  
Washington County, MN  
Wright County, MN  
St. Croix County, WI

Mobile, AL MSA  
Baldwin County, AL  
Mobile County, AL

Modesto, CA MSA  
Stanislaus County, CA

Monmouth-Ocean, NJ PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA

Monroe, LA MSA  
Ouachita Parish, LA

Montgomery, AL MSA  
Autauga County, AL  
Elmore County, AL  
Montgomery County, AL

Muncie, IN MSA  
Delaware County, IN

Muskegon, MI MSA  
Muskegon County, MI

Naples, FL MSA  
Collier County, FL

Nashua, NH PMSA—see Boston-Lawrence-Salem, MA-NH CMSA

Nashville, TN MSA  
Cheatham County, TN  
Davidson County, TN  
Dickson County, TN  
Robertson County, TN  
Rutherford County, TN  
Sumner County, TN  
Williamson County, TN  
Wilson County, TN

Nassau-Suffolk, NY PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA

New Bedford, MA MSA  
Bristol County, MA (part)  
Acushnet town, MA  
Dartmouth town, MA  
Fairhaven town, MA  
Freetown town, MA  
New Bedford city, MA

New Bedford, MA MSA—Con.  
Plymouth County, MA (part)  
Marion town, MA  
Mattapoisett town, MA  
Rochester town, MA

New Britain, CT PMSA—see Hartford-New Britain-Middletown, CT CMSA

New Haven-Meriden, CT MSA  
Middlesex County, CT (part)  
Clinton town, CT  
Killingworth town, CT  
New Haven County, CT (part)  
Bethany town, CT  
Branford town, CT  
Cheshire town, CT  
East Haven town, CT  
Guilford town, CT  
Hamden town, CT  
Madison town, CT  
Meriden city, CT  
New Haven city, CT  
North Branford town, CT  
North Haven town, CT  
Orange town, CT  
Wallingford town, CT  
West Haven city, CT  
Woodbridge town, CT

New London-Norwich, CT-RI MSA  
New London County, CT (part)  
Bozrah town, CT  
East Lyme town, CT  
Franklin town, CT  
Griswold town balance, CT  
Groton city, CT  
Groton town balance, CT  
Jewett City borough, CT  
Ledyard town, CT  
Lisbon town, CT  
Montville town, CT  
New London city, CT  
North Stonington town, CT  
Norwich city, CT  
Old Lyme town, CT  
Preston town, CT  
Salem town, CT  
Sprague town, CT  
Stonington town, CT  
Waterford town, CT  
Windham County, CT (part)  
Canterbury town, CT  
Washington County, RI (part)  
Hopkinton town, RI  
Westerly town, RI

New Orleans, LA MSA  
Jefferson Parish, LA  
Orleans Parish, LA  
St. Bernard Parish, LA  
St. Charles Parish, LA  
St. John the Baptist Parish, LA  
St. Tammany Parish, LA

New York, NY PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA

New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA  
Bergen-Passaic, NJ PMSA  
Bergen County, NJ  
Passaic County, NJ  
Bridgeport-Milford, CT PMSA  
Fairfield County, CT (part)  
Bridgeport city, CT  
Easton town, CT  
Fairfield town, CT  
Monroe town, CT

New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA—Con.  
Bridgeport-Milford, CT PMSA—Con.  
Fairfield County, CT (part)—Con.  
Shelton city, CT  
Stratford town, CT  
Trumbull town, CT  
New Haven County, CT (part)  
Ansonia city, CT  
Beacon Falls town, CT  
Derby city, CT  
Milford city, CT  
Milford town balance, CT  
Oxford town, CT  
Seymour town, CT  
Woodmont borough, CT

Danbury, CT PMSA  
Fairfield County, CT (part)  
Bethel town, CT  
Brookfield town, CT  
Danbury city, CT  
New Fairfield town, CT  
Newtown town, CT  
Redding town, CT  
Ridgefield town, CT  
Sherman town, CT  
Litchfield County, CT (part)  
Bridgewater town, CT  
New Milford town, CT

Jersey City, NJ PMSA  
Hudson County, NJ

Middlesex-Somerset-Hunterdon, NJ PMSA  
Hunterdon County, NJ  
Middlesex County, NJ  
Somerset County, NJ

Monmouth-Ocean, NJ PMSA  
Monmouth County, NJ  
Ocean County, NJ

Nassau-Suffolk, NY PMSA  
Nassau County, NY  
Suffolk County, NY

New York, NY PMSA  
Bronx County, NY  
Kings County, NY  
New York County, NY  
Putnam County, NY  
Queens County, NY  
Richmond County, NY  
Rockland County, NY  
Westchester County, NY

Newark, NJ PMSA  
Essex County, NJ  
Morris County, NJ  
Sussex County, NJ  
Union County, NJ

Norwalk, CT PMSA  
Fairfield County, CT (part)  
Norwalk city, CT  
Weston town, CT  
Westport town, CT  
Wilton town, CT

Orange County, NY PMSA  
Orange County, NY

Stamford, CT PMSA  
Fairfield County, CT (part)  
Darien town, CT  
Greenwich town, CT  
New Canaan town, CT  
Stamford city, CT



**Newark, NJ PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**  
**Niagara Falls, NY PMSA—see Buffalo-Niagara Falls, NY CMSA**

**Norfolk-Virginia Beach-Newport News, VA MSA**

Gloucester County, VA  
James City County, VA  
York County, VA  
Chesapeake city, VA  
Hampton city, VA  
Newport News city, VA  
Norfolk city, VA  
Poquoson city, VA  
Portsmouth city, VA  
Suffolk city, VA  
Virginia Beach city, VA  
Williamsburg city, VA

**Norwalk, CT PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

**Oakland, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**Ocala, FL MSA**

Marion County, FL

**Odessa, TX MSA**

Ector County, TX

**Oklahoma City, OK MSA**

Canadian County, OK  
Cleveland County, OK  
Logan County, OK  
McClain County, OK  
Oklahoma County, OK  
Pottawatomie County, OK

**Olympia, WA MSA**

Thurston County, WA

**Omaha, NE-IA MSA**

Pottawattamie County, IA  
Douglas County, NE  
Sarpy County, NE  
Washington County, NE

**Orange County, NY PMSA—see New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA**

**Orlando, FL MSA**

Orange County, FL  
Osceola County, FL  
Seminole County, FL

**Owensboro, KY MSA**

Daviess County, KY

**Oxnard-Ventura, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA**

**Panama City, FL MSA**

Bay County, FL

**Parkersburg-Marietta, WV-OH MSA**

Washington County, OH  
Wood County, WV

**Pascagoula, MS MSA**

Jackson County, MS

**Pawtucket-Woonsocket-Attleboro, RI-MA PMSA—see Providence-Pawtucket-Fall River, RI-MA CMSA**

**Pensacola, FL MSA**

Escambia County, FL  
Santa Rosa County, FL

**Peoria, IL MSA**

Peoria County, IL  
Tazewell County, IL  
Woodford County, IL

**Philadelphia, PA-NJ PMSA—see Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA**

**Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA**

Philadelphia, PA-NJ PMSA

Burlington County, NJ  
Camden County, NJ  
Gloucester County, NJ  
Bucks County, PA  
Chester County, PA  
Delaware County, PA  
Montgomery County, PA  
Philadelphia County, PA

Trenton, NJ PMSA

Mercer County, NJ

Vineland-Millville-Bridgeton, NJ PMSA

Cumberland County, NJ

Wilmington, DE-NJ-MD PMSA

New Castle County, DE

Cecil County, MD

Salem County, NJ

**Phoenix, AZ MSA**

Maricopa County, AZ

**Pine Bluff, AR MSA**

Jefferson County, AR

**Pittsburgh, PA PMSA—see Pittsburgh-Beaver Valley, PA CMSA**

**Pittsburgh-Beaver Valley, PA CMSA**

Beaver County, PA PMSA

Beaver County, PA

Pittsburgh, PA PMSA

Allegheny County, PA

Fayette County, PA

Washington County, PA

Westmoreland County, PA

**Pittsfield, MA MSA**

Berkshire County, MA (part)

Cheshire town, MA

Dalton town, MA

Hinsdale town, MA

Lanesborough town, MA

Lee town, MA

Lenox town, MA

Pittsfield city, MA

Richmond town, MA

Stockbridge town, MA

**Portland, ME MSA**

Cumberland County, ME (part)

Cape Elizabeth town, ME

Cumberland town, ME

Falmouth town, ME

Freeport town, ME

Gorham town, ME

Gray town, ME

North Yarmouth town, ME

Portland city, ME

Raymond town, ME

Scarborough town, ME

South Portland city, ME

Standish town, ME

Westbrook city, ME

Windham town, ME

Yarmouth town, ME

York County, ME (part)

Buxton town, ME

Hollis town, ME

Old Orchard Beach town, ME

**Portland, OR PMSA—see Portland-Vancouver, OR-WA CMSA**

**Portland-Vancouver, OR-WA CMSA**

Portland, OR PMSA

Clackamas County, OR

Multnomah County, OR

Washington County, OR

Yamhill County, OR

Vancouver, WA PMSA

Clark County, WA

**Portsmouth-Dover-Rochester, NH-ME MSA**

York County, ME (part)

Berwick town, ME

Eliot town, ME

Kittery town, ME

North Berwick town, ME

Ogunquit town, ME

South Berwick town, ME

Wells town, ME

York town, ME

Rockingham County, NH (part)

Exeter town, NH

Greenland town, NH

Hampton town, NH

New Castle town, NH

Newfields town, NH

Newington town, NH

Newmarket town, NH

North Hampton town, NH

Portsmouth city, NH

Rye town, NH

Stratham town, NH

Strafford County, NH (part)

Barrington town, NH

Dover city, NH

Durham town, NH

Farmington town, NH

Lee town, NH

Madbury town, NH

Milton town, NH

Rochester city, NH

Rollinsford town, NH

Somersworth city, NH

**Poughkeepsie, NY MSA**

Dutchess County, NY

**Providence, RI PMSA—see Providence-Pawtucket-Fall River, RI-MA CMSA**

**Providence-Pawtucket-Fall River, RI-MA CMSA**

Fall River, MA-RI PMSA

Bristol County, MA (part)

Fall River city, MA

Somerset town, MA

Swansea town, MA

Westport town, MA

Newport County, RI (part)

Little Compton town, RI

Tiverton town, RI

**Pawtucket-Woonsocket-Attleboro, RI-MA PMSA**

Bristol County, MA (part)

Attleboro city, MA

North Attleborough town, MA

Rehoboth town, MA

Seekonk town, MA

Norfolk County, MA (part)

Plainville town, MA

Worcester County, MA (part)

Blackstone town, MA

Millville town, MA

Providence County, RI (part)

Burrillville town, RI

Central Falls city, RI

Cumberland town, RI

Lincoln town, RI



**Providence-Pawtucket-Fall River, RI-MA CMSA—Con.**

Pawtucket-Woonsocket-Attleboro, RI-MA PMSA—Con.

Providence County, RI (part)—Con.

North Smithfield town, RI

Pawtucket city, RI

Smithfield town, RI

Woonsocket city, RI

Providence, RI PMSA

Bristol County, RI (part)

Barrington town, RI

Bristol town, RI

Warren town, RI

Kent County, RI (part)

Coventry town, RI

East Greenwich town, RI

Warwick city, RI

West Warwick town, RI

Newport County, RI (part)

Jamestown town, RI

Providence County, RI (part)

Cranston city, RI

East Providence city, RI

Foster town, RI

Glocester town, RI

Johnston town, RI

North Providence town, RI

Providence city, RI

Scituate town, RI

Washington County, RI (part)

Exeter town, RI

Narragansett town, RI

North Kingstown town, RI

Richmond town, RI

South Kingstown town, RI

**Provo-Orem, UT MSA**

Utah County, UT

**Pueblo, CO MSA**

Pueblo County, CO

**Racine, WI PMSA—see Milwaukee-Racine, WI CMSA**

**Raleigh-Durham, NC MSA**

Durham County, NC

Franklin County, NC

Orange County, NC

Wake County, NC

**Rapid City, SD MSA**

Pennington County, SD

**Reading, PA MSA**

Berks County, PA

**Redding, CA MSA**

Shasta County, CA

**Reno, NV MSA**

Washoe County, NV

**Richland-Kennewick-Pasco, WA MSA**

Benton County, WA

Franklin County, WA

**Richmond-Petersburg, VA MSA**

Charles City County, VA

Chesterfield County, VA

Dinwiddie County, VA

Goochland County, VA

Hanover County, VA

Henrico County, VA

New Kent County, VA

Powhatan County, VA

Prince George County, VA

Colonial Heights city, VA

Hopewell city, VA

Petersburg city, VA

Richmond city, VA

**Riverside-San Bernardino, CA PMSA—see Los Angeles-Anaheim-Riverside, CA CMSA**

**Roanoke, VA MSA**

Botetourt County, VA

Roanoke County, VA

Roanoke city, VA

Salem city, VA

**Rochester, MN MSA**

Olmsted County, MN

**Rochester, NY MSA**

Livingston County, NY

Monroe County, NY

Ontario County, NY

Orleans County, NY

Wayne County, NY

**Rockford, IL MSA**

Boone County, IL

Winnebago County, IL

**Sacramento, CA MSA**

El Dorado County, CA

Placer County, CA

Sacramento County, CA

Yolo County, CA

**Saginaw-Bay City-Midland, MI MSA**

Bay County, MI

Midland County, MI

Saginaw County, MI

**St. Cloud, MN MSA**

Benton County, MN

Sherburne County, MN

Stearns County, MN

**St. Joseph, MO MSA**

Buchanan County, MO

**St. Louis, MO-IL MSA**

Clinton County, IL

Jersey County, IL

Madison County, IL

Monroe County, IL

St. Clair County, IL

Franklin County, MO

Jefferson County, MO

St. Charles County, MO

St. Louis County, MO

St. Louis city, MO

**Salem, OR MSA**

Marion County, OR

Polk County, OR

**Salem-Gloucester, MA PMSA—see Boston-Lawrence-Salem, MA-NH CMSA**

**Salinas-Seaside-Monterey, CA MSA**

Monterey County, CA

**Salt Lake City-Ogden, UT MSA**

Davis County, UT

Salt Lake County, UT

Weber County, UT

**San Angelo, TX MSA**

Tom Green County, TX

**San Antonio, TX MSA**

Bexar County, TX

Comal County, TX

Guadalupe County, TX

**San Diego, CA MSA**

San Diego County, CA

**San Francisco, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**San Francisco-Oakland-San Jose, CA CMSA**

Oakland, CA PMSA

Alameda County, CA

Contra Costa County, CA

**San Francisco-Oakland-San Jose, CA CMSA—Con.**

San Francisco, CA PMSA

Marin County, CA

San Francisco County, CA

San Mateo County, CA

San Jose, CA PMSA

Santa Clara County, CA

Santa Cruz, CA PMSA

Santa Cruz County, CA

Santa Rosa-Petaluma, CA PMSA

Sonoma County, CA

Vallejo-Fairfield-Napa, CA PMSA

Napa County, CA

Solano County, CA

**San Jose, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**Santa Barbara-Santa Maria-Lompoc, CA MSA**

Santa Barbara County, CA

**Santa Cruz, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**Santa Fe, NM MSA**

Los Alamos County, NM

Santa Fe County, NM

**Santa Rosa-Petaluma, CA PMSA—see San Francisco-Oakland-San Jose, CA CMSA**

**Sarasota, FL MSA**

Sarasota County, FL

**Savannah, GA MSA**

Chatham County, GA

Effingham County, GA

**Scranton-Wilkes-Barre, PA MSA**

Columbia County, PA

Lackawanna County, PA

Luzerne County, PA

Monroe County, PA

Wyoming County, PA

**Seattle, WA PMSA—see Seattle-Tacoma, WA CMSA**

**Seattle-Tacoma, WA CMSA**

Seattle, WA PMSA

King County, WA

Snohomish County, WA

Tacoma, WA PMSA

Pierce County, WA

**Sharon, PA MSA**

Mercer County, PA

**Sheboygan, WI MSA**

Sheboygan County, WI

**Sherman-Denison, TX MSA**

Grayson County, TX

**Shreveport, LA MSA**

Bossier Parish, LA

Caddo Parish, LA

**Sioux City, IA-NE MSA**

Woodbury County, IA

Dakota County, NE

**Sioux Falls, SD MSA**

Minnehaha County, SD

**South Bend-Mishawaka, IN MSA**

St. Joseph County, IN

**Spokane, WA MSA**

Spokane County, WA

**Springfield, IL MSA**

Menard County, IL

Sangamon County, IL

**Springfield, MO MSA**

Christian County, MO

Greene County, MO



**Springfield, MA MSA**

Hampden County, MA (part)  
 Agawam town, MA  
 Chicopee city, MA  
 East Longmeadow town, MA  
 Hampden town, MA  
 Holyoke city, MA  
 Longmeadow town, MA  
 Ludlow town, MA  
 Monson town, MA  
 Montgomery town, MA  
 Palmer town, MA  
 Russell town, MA  
 Southwick town, MA  
 Springfield city, MA  
 Westfield city, MA  
 West Springfield town, MA  
 Wilbraham town, MA  
 Hampshire County, MA (part)  
 Belchertown town, MA  
 Easthampton town, MA  
 Granby town, MA  
 Huntington town, MA  
 Northampton city, MA  
 Southampton town, MA  
 South Hadley town, MA

**Stamford, CT PMSA—see New York-Northern  
 New Jersey-Long Island, NY-NJ-CT CMSA**

**State College, PA MSA**

Centre County, PA

**Steubenville-Weirton, OH-WV MSA**

Jefferson County, OH  
 Brooke County, WV  
 Hancock County, WV

**Stockton, CA MSA**

San Joaquin County, CA

**Syracuse, NY MSA**

Madison County, NY  
 Onondaga County, NY  
 Oswego County, NY

**Tacoma, WA PMSA—see Seattle-Tacoma,  
 WA CMSA**

**Tallahassee, FL MSA**

Gadsden County, FL  
 Leon County, FL

**Tampa-St. Petersburg-Clearwater, FL MSA**

Hernando County, FL  
 Hillsborough County, FL  
 Pasco County, FL  
 Pinellas County, FL

**Terre Haute, IN MSA**

Clay County, IN  
 Vigo County, IN

**Texarkana, TX-Texarkana, AR MSA**

Miller County, AR  
 Bowie County, TX

**Toledo, OH MSA**

Fulton County, OH  
 Lucas County, OH  
 Wood County, OH

**Topeka, KS MSA**

Shawnee County, KS

**Trenton, NJ PMSA—see Philadelphia-Wilmington-  
 Trenton, PA-NJ-DE-MD CMSA**

**Tucson, AZ MSA**

Pima County, AZ

**Tulsa, OK MSA**

Creek County, OK  
 Osage County, OK  
 Rogers County, OK  
 Tulsa County, OK  
 Wagoner County, OK

**Tuscaloosa, AL MSA**

Tuscaloosa County, AL

**Tyler, TX MSA**

Smith County, TX

**Utica-Rome, NY MSA**

Herkimer County, NY  
 Oneida County, NY

**Vallejo-Fairfield-Napa, CA PMSA—see San  
 Francisco-Oakland-San Jose, CA CMSA**

**Vancouver, WA PMSA—see Portland-  
 Vancouver, OR-WA CMSA**

**Victoria, TX MSA**

Victoria County, TX

**Vineland-Millville-Bridgeton, NJ PMSA—see  
 Philadelphia-Wilmington-Trenton, PA-NJ-  
 DE-MD CMSA**

**Visalia-Tulare-Porterville, CA MSA**

Tulare County, CA

**Waco, TX MSA**

McLennan County, TX

**Washington, DC-MD-VA MSA**

District of Columbia, DC  
 Calvert County, MD  
 Charles County, MD  
 Frederick County, MD  
 Montgomery County, MD  
 Prince George's County, MD  
 Arlington County, VA  
 Fairfax County, VA  
 Loudoun County, VA  
 Prince William County, VA  
 Stafford County, VA  
 Alexandria city, VA  
 Fairfax city, VA  
 Falls Church city, VA  
 Manassas city, VA  
 Manassas Park city, VA

**Waterbury, CT MSA**

Litchfield County, CT (part)  
 Bethlehem town, CT  
 Thomaston town, CT  
 Watertown town, CT  
 Woodbury town, CT  
 New Haven County, CT (part)  
 Middlebury town, CT  
 Naugatuck borough, CT  
 Prospect town, CT  
 Southbury town, CT  
 Waterbury city, CT  
 Wolcott town, CT

**Waterloo-Cedar Falls, IA MSA**

Black Hawk County, IA  
 Bremer County, IA

**Wausau, WI MSA**

Marathon County, WI

**West Palm Beach-Boca Raton-Delray Beach,  
 FL MSA**

Palm Beach County, FL

**Wheeling, WV-OH MSA**

Belmont County, OH  
 Marshall County, WV  
 Ohio County, WV

**Wichita, KS MSA**

Butler County, KS  
 Harvey County, KS  
 Sedgwick County, KS

**Wichita Falls, TX MSA**

Wichita County, TX

**Williamsport, PA MSA**

Lycoming County, PA

**Wilmington, DE-NJ-MD PMSA—see Philadelphia-  
 Wilmington-Trenton, PA-NJ-DE-MD CMSA**

**Wilmington, NC MSA**

New Hanover County, NC

**Worcester, MA MSA**

Worcester County, MA (part)

Auburn town, MA  
 Barre town, MA  
 Boylston town, MA  
 Brookfield town, MA  
 Charlton town, MA  
 Clinton town, MA  
 Douglas town, MA  
 Dudley town, MA  
 East Brookfield town, MA  
 Grafton town, MA  
 Holden town, MA  
 Leicester town, MA  
 Millbury town, MA  
 Northborough town, MA  
 Northbridge town, MA  
 North Brookfield town, MA  
 Oxford town, MA  
 Paxton town, MA  
 Princeton town, MA  
 Rutland town, MA  
 Shrewsbury town, MA  
 Spencer town, MA  
 Sterling town, MA  
 Sutton town, MA  
 Uxbridge town, MA  
 Webster town, MA  
 Westborough town, MA  
 West Boylston town, MA  
 Worcester city, MA

**Yakima, WA MSA**

Yakima County, WA

**York, PA MSA**

Adams County, PA  
 York County, PA

**Youngstown-Warren, OH MSA**

Mahoning County, OH  
 Trumbull County, OH

**Yuba City, CA MSA**

Sutter County, CA  
 Yuba County, CA











# PUBLICATION PROGRAM

## 1987 CENSUS OF CONSTRUCTION INDUSTRIES

The Census of Construction Industries is taken once every 5 years. The census covers all establishments engaged in construction, including:

- Building contractors
- Heavy construction contractors
- Special trade contractors (including plumbers, carpenters, painters, electricians)
- Land developers and subdividers

Data products in the Census of Construction Industries are issued in 4 publication series and in 3 other media:

- Printed reports [P]
- CD-ROM [C]
- Computer tape [T]
- Highlights online [+]

### Preliminary Industry Series (CC87-I-1(P) through CC87-I-28(P))

(Available November 1988 through May 1989) [P]

Twenty-seven separate industry reports and a United States summary report, providing national statistics for establishments with payroll. Statistics shown for 1987 include:

- Number of establishments
- Number of employees
- Payroll
- Hours worked
- Value of construction work done, by type of structure
- Selected operating costs

### Final Industry Series (CC87-I-1 through CC87-I-28)

(Available June 1989 through November 1989) [P] [C] [T] [+]

Twenty-seven separate industry reports and a United States summary report, providing statistics for the Nation and individual States on establishments with payroll. These reports update figures from the preliminary industry series (employment, payroll, value of construction, etc.) and provide measures of the following:

- Capital expenditures
- Inventories
- Industry profiles
- Assets
- Depreciation
- And much more

## Geographic Area Series (CC87-A-1 through CC87-A-10)

(Available January 1990 through March 1990) [P] [C] [T] [+]

Nine reports on the construction industries, representing each census geographic division, and a United States summary report. Regional reports provide detailed data for States and metropolitan statistical areas.

## Subject Report—Legal Form of Organization and Type of Operation (CC87-S-1)

(Available May 1990) [P]

One report providing selected national statistics for each industry by legal form of organization and type of operation. This report includes data for establishments with and without payroll. Data in this report include—

- Employment
- Payroll
- Value of construction work done
- Selected operating costs

## OTHER ECONOMIC CENSUSES REPORTS

The Census of Construction Industries is part of the 1987 Economic Censuses. These are conducted at five-year intervals in years ending in 2 and 7 and consist of seven separate censuses:

- Census of Retail Trade
- Census of Wholesale Trade
- Census of Service Industries
- Census of Transportation
- Census of Manufactures
- Census of Mineral Industries
- Census of Construction

...plus several related programs: enterprise statistics; information on minority-owned and women-owned businesses; and the Census of Outlying Areas, including separate economic censuses of Puerto Rico and other outlying areas. The Census of Agriculture and Census of Governments are conducted separately.

## HOW TO ORDER DATA PRODUCTS

Order forms for the specific reports and other data products may be obtained from Data User Services Division, Customer Services (Publications), Bureau of the Census, Washington, DC 20233. If you have any questions, call Census Customer Services 1-(301)-763-4100.





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